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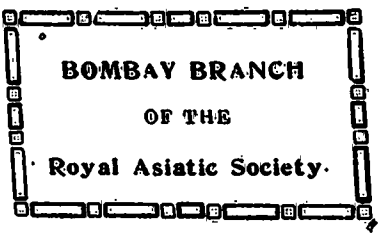

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FIG. 1.

EXPENDITURE ON EDUCATION IN INDIA.

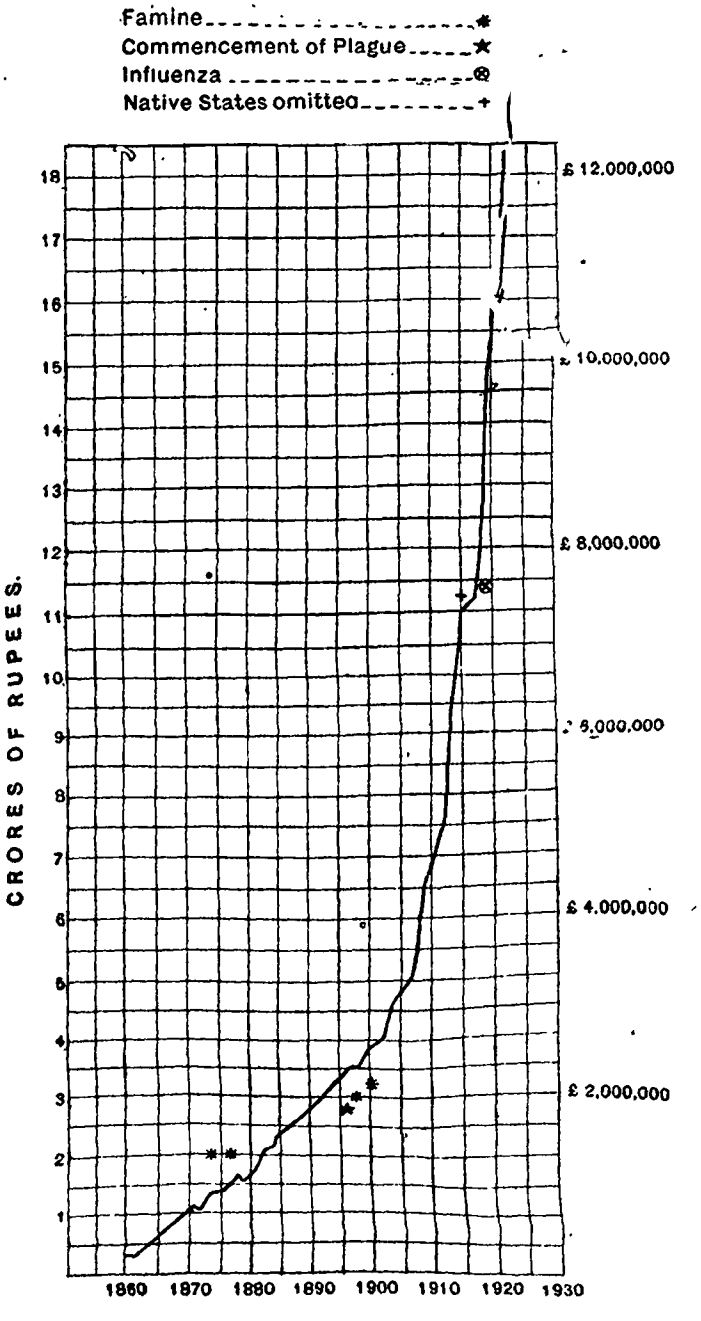

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FIG. 2.

TOTAL NUMBER OF PUPILS UNDER INSTRUCTION IN INDIA.

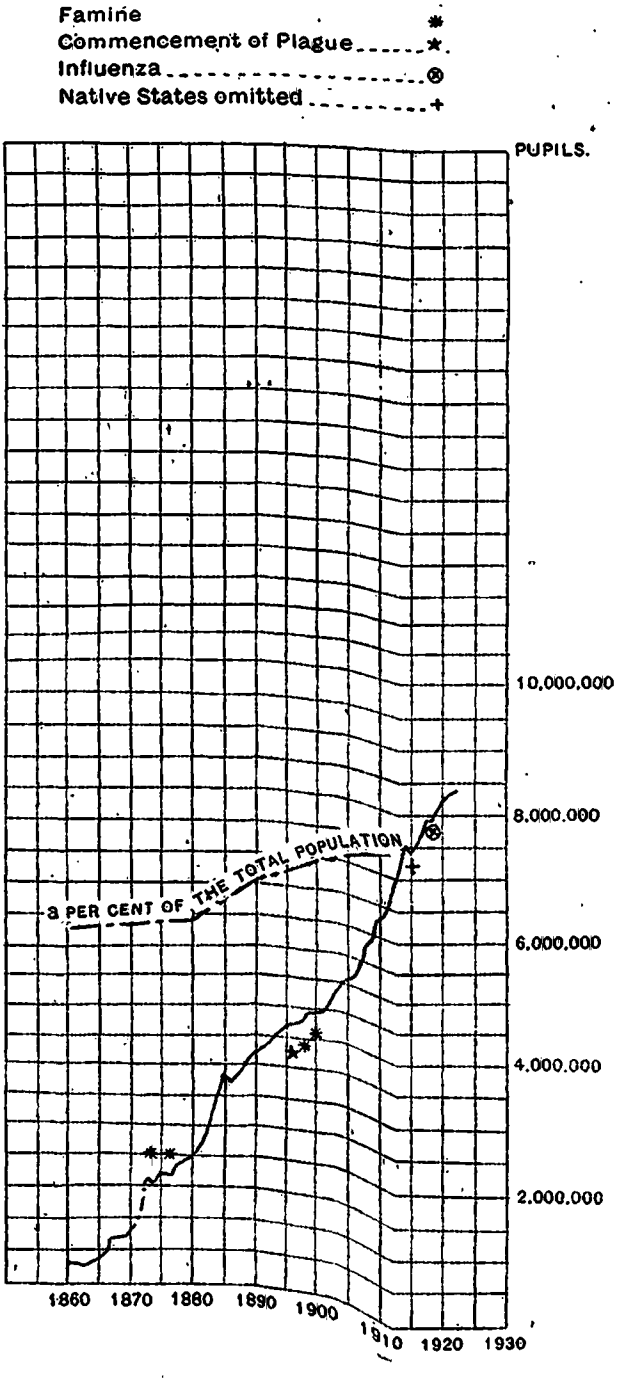

FIG. 3.

EXPENDITURE ON EDUCATION.

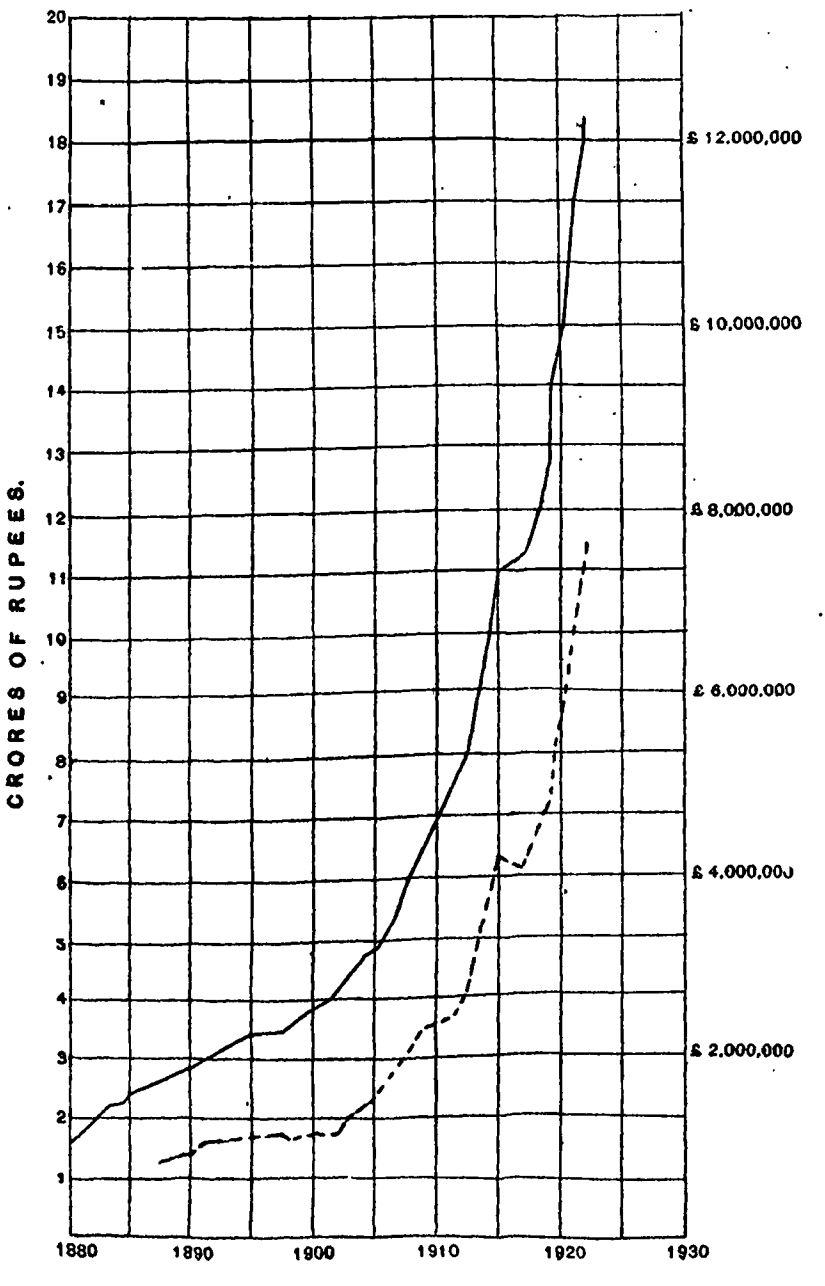

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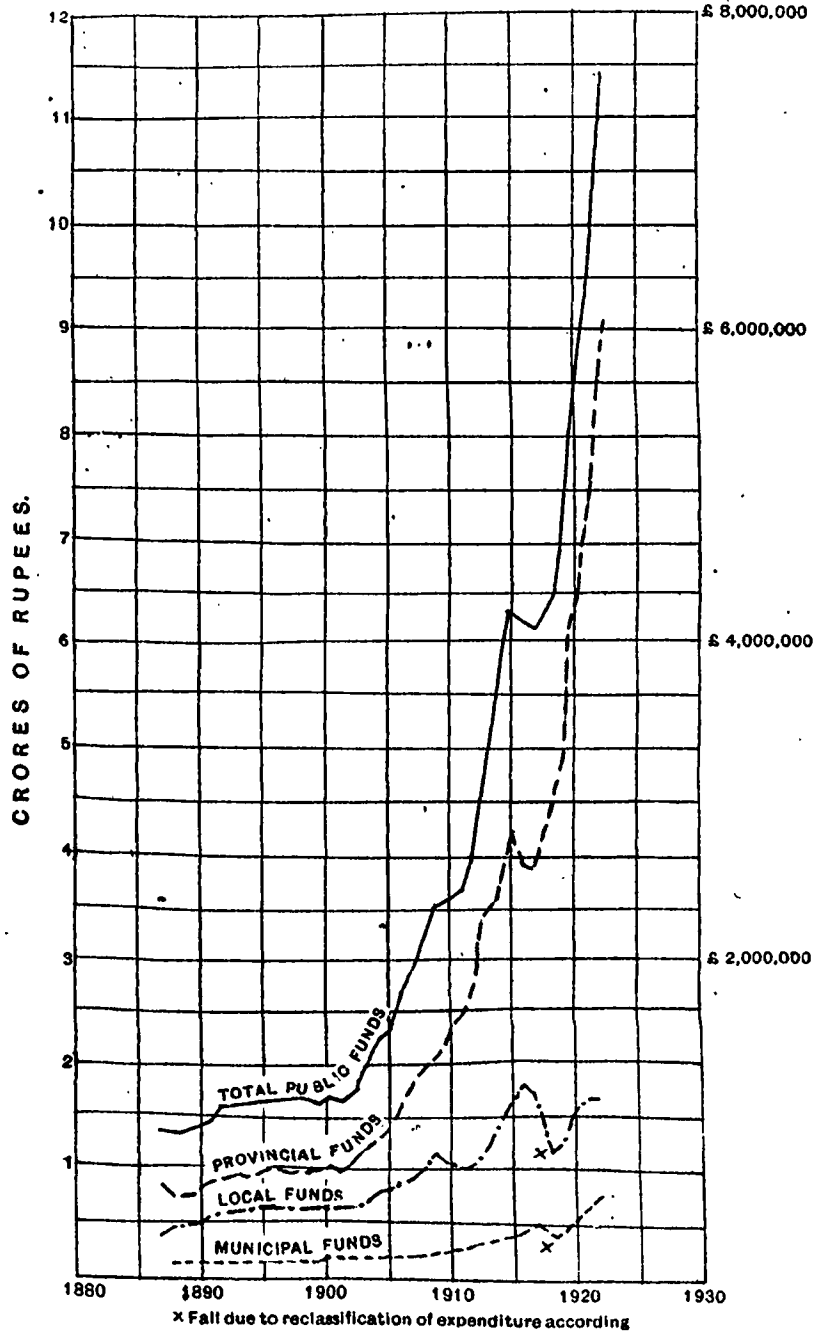
FIG 4.

PUBLIC EXPENDITURE.



× Fall due to reclassification of expenditure according to which Government contributions made to local bodies for education are included in expenditure from provincial funds.

October, 1923.—No. 7451-1

PROGRESS

OF

EDUCATION IN INDIA

1917–1922

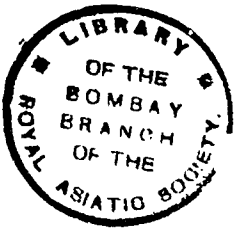
134416.

BY

J. A. RICHEY, C.I.E.

EIGHTH QUINQUENNIAL REVIEW

VOL. I.



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PREFACE.

This, the eighth quinquennial review on the progress of education in India, covers the period from April the 1st, 1917, to March the 31st, 1922. It must begin, like its predecessors, by offering an excuse for its late appearance. The materials on which it is based, returns and reports from universities and from the fifteen provinces and administrations of British India, were received at intervals during the spring and summer of this year, the last but not least important instalments only reaching Simla in July. In spite of such delays this review will issue no later in the year than its predecessors.

The area with which it deals, 1,091,229 square miles, is practically the same as that dealt with in the last review, but the population of that area is shown by the census of 1921 to have increased from 244 millions to 247 millions. In form and content the review differs in several particulars from previous reviews. The substitution of octavo size for foolscap is a change which will, it is hoped, commend itself to readers. Certain changes have been made in the distribution of the subject matter between the different chapters. Other changes have been chiefly in the direction of elimination and compression. For example, an admirable description of the general characteristics of Indian education was given by Sir Henry Sharp in the opening chapter of the last review; I have assumed that the reader is familiar with these characteristics. No illustrations have been included in this volume and the number of tables in the second volume has been curtailed. These omissions have been made not of choice but of necessity. Owing to the present financial position of the Government of India no additional staff has been employed as on previous occasions to assist in the preparation of the quinquennial review; on the contrary even the ordinary staff available has been drastically reduced. The task of compiling the numerous statements and tables contained in both volumes has largely devolved upon Mr. F. E. Quraishi

of the Education Department whose assistance has been most valuable.

I have shown my obligation to the authors of the various provincial reports by quoting freely and literally from their works.* The officers responsible for the major reports are:—

Madras . . .	Mr. R. G. Grieve, M.A., M.L.C.
Bombay . . .	Mr. F. B. P. Lory, M.A.
Bengal . . .	Mr. J. W. Holme, M.A.
United Provinces .	Mr. A. H. Mackenzie, M.A., B.Sc., M.L.C., assisted by Mr. H. B. Wetherill, M.A.
Punjab . . .	Mr. G. Anderson, M.A., C.I.E.
Burma . . .	Sir Mark Hunter, Kt., M.A., D.Litt., assisted by Mr. J. P. Bulkeley, M.A.
Bihar and Orissa . .	Mr. G. E. Fawcus, M.A., C.I.E., O.B.E.
Central Provinces .	Mr. C. E. W. Jones, M.A., M.L.C.
Assam . . .	Mr. J. R. Cunningham, M.A., C.I.E.
North-West Frontier Province.	Mr. J. H. Towle, M.A.
Delhi . . . . Ajmer-Merwara . .	Mr. L. T. Watkins, M.A.

I am also indebted to Dr. D. Clouston, D.Sc., C.I.E., Officiating Agricultural Adviser to the Government of India, for the interesting section on agricultural education, to the Medical, Veterinary and Forestry Departments for the sections dealing with those subjects, and to the Military Training Directorate of the General Staff Branch, Army Headquarters, for the chapter on education in the Army, which is a new feature in the present review. The all-India general tables included in Volume II of the review were compiled as usual in the office of the Director of Statistics.

J. A. RICHEY,

Educational Commissioner with the Government of India.

SIMLA,

The 25th September 1923.

* The quotations are indicated in footnotes by the names of the Provinces and the pages of the reports.

PROGRESS

OF

EDUCATION IN INDIA

1917–1922.

CHAPTER I.

Introductory.

General.

There is no lack of incident or variety in the history of Indian education during the last five years. Opening with a flood of enthusiasm, which would have swept all children of school-going age into school, the period closed with an ebb of re-action and doubt which sought to empty the schools of even their voluntary attendance. The forces behind both these movements were political. The feeling that the chief obstacle to India's progress towards a complete nationhood is to be found in the illiteracy of her masses first found expression in Mr. Gokhale's Primary Education Bill of 1911. It was brought to a head by the declaration of the Secretary of State in August 1917 that India's future lay in the progressive development by successive stages of complete self-government. Responsible Indian thought realised that the rate of progress from a bureaucratic to a democratic form of government must be largely dependent on the evolution of a popular electorate capable of exercising the franchise and so, ultimately, on the rate of expansion of literacy among the masses. Expansion under a voluntary system of education was proving a slow and uncertain business. The solution appeared

Compulsory Education.

to be the early introduction of compulsory education; and Education Acts with this object in view were introduced in rapid succession in the seven major provinces of India between February 1918 and October 1920. The nature of these acts and the causes which have conspired to render them hitherto almost inoperative will be discussed in the chapter on primary education. It is possible that they would have proved more immediately effective had they limited their aims to the enforcement on local bodies of the obligation to provide educational facilities for all children of school-going age, that is to say, if compulsion had first been exercised on local bodies and not directly on the parents. But the feeling which prompted the promoters was sound; and even if the new acts may need amendment in the direction indicated, as the Government of Bombay has already realised, they constitute a landmark in the history of Indian education.

Economic distress.

2. The introduction of these acts was followed by a period of economic distress and political unrest which India shared with the rest of the world. Under a voluntary system of education scarcity and high prices at once react upon school attendance, and the numbers were already falling in some parts of India when the schools were subjected to a direct political attack. "The long continuance of the war brought depression in its train. The cost of education rose with the price of food and clothing and school materials. Money was scarce. Employment proved hard or impossible to get. The spirit of hope was discouraged, and as the line wavered, the politicians struck. This was due to no astuteness on their part. They were themselves the creatures of the complex which they exploited and, with those whom they misled, are now equally its victims."[1]

Non-co-operation movement. (a) Its beginnings.

3. It is not within the scope of an educational report to consider the political origins of the non-co-operation movement. It did not at first make any direct attack upon the schools, though attendance at political meetings, enrolment as volunteers and other similar activities served to distract the attention of students from their studies and to impede discipline. It was only after the meeting of the Indian National Congress held in Nagpur in December 1920 that the campaign was launched which succeeded in crippling some schools beyond hope of recovery, in disorganising the work of others for six months or a year and in ruining the careers of many promising scholars. At the Nagpur meeting resolutions were passed declaring a boycott of all schools recognised by Government. This started a movement which spread in successive waves over the whole of India. In no province did it maintain its

[1] Assam, p. 36.

maximum force for more than a few months, so that some provinces were already recovering from the shock while in others the disturbance was at its height. Its progress is marked by a rapid local decline in attendance at schools and colleges and by the occurrence of school strikes and other signs of indiscipline.

4. Originally forming, as it did, part of a campaign which aimed at paralysing the administration, it was purely destructive in character. It was an appeal to the student community to break away from the control of Government, and Government control is represented to students by the authorities who direct their studies. A large number of students who responded to the appeal did so under the impression that they were thereby in some obscure way serving their country. The power of the appeal was strengthened by a very genuine discontent with a course of education which appeared to lead to nothing but the acquisition of a degree, an honour no longer worth the money spent in obtaining it. The political appeal was thus supported by the economic. Finally it must be remembered that the appeal was made to most inflammable material. "The drabness and joylessness of student life in Bengal has been a matter for frequent comment. The Calcutta University Commission Report has perhaps said the last word in describing the conditions of this life. Poverty, the cram-drudgery of his studies, the dreary surroundings in which a student too often finds himself housed, make him 'moody, depressed and absorbed in himself and his prospects. He needs therefore more than other students of the same age, recreation and diversion. --- It is not surprising therefore if in moments of despondency, he falls a victim to uncontrollable excitement, sometimes of the most serious and violent nature.' Thus the appeal of the agitators, ostensibly to the noblest instincts of the student, his love of country and eagerness for sacrifice, couched in terms that suggested glowing ideas of 'national' service, found its response in that natural craving for excitement in the adolescent, which in other countries would have found vent in college 'rags,' in sport, in a hundred and one ways made impossible to the student in Bengal by his circumstances."[2] (b) Its appeal.

"All classes of students have been affected and among those who responded to pressure are those whom colleges could least afford to lose as well as those whose departure caused no regret. There was something in the movement that appealed to most diverse types of mind. The call to 'national' service and self-sacrifice found a quick response among the best, un-

[2] Bengal, pp. 94-95.

intelligible to those who do not realize the emotional background of student life and the absence of a strong sense of humour. While older men have been seeing visions the young men are dreaming dreams. Imagination has been fired and a spiritual 'uplift' initiated. Something that had long been wanting in our college life had been supplied. To another class of temperament the situation presented possibilities of romance and adventure that irradiated a colourless existence. Picketing and processions were as irresistible to such minds as a bump-supper and a 'rag' to Oxford under-graduates. Others became for the first time conscious that they were wasting time over a kind of education not suited to their needs and leading them at its best to an office stool. It is greatly to the credit of the staff that these feelings, so natural in themselves but affording such excellent material for unscrupulous agitators, found expression comparatively seldom in violent or offensive action, and that judgment was so often suspended and scope left for reflection. Credit is also due to parents, as has specially been recorded in the Punjab report. Though other reports refer gloomily to the decay of parental authority it is clear that the losses would have been far greater had not many parents, in the teeth of local ridicule and opposition, brought great pressure to bear on their sons."[3]

(c) The effect on attendance.

5. It is of course impossible to say how many students were actually withdrawn from schools or colleges as a result of the non-co-operation movement, since a variety of other factors, chief among which was the high cost of living, also affected the attendance in the years following the war. The following statements give some indication of the losses:—

Year.	Arts Colleges.		Secondary Schools.						Primary Schools.	
			High Schools.		Middle Shools.		Total.			
	Institutions.	Scholars.	Scholars.		Scholars.		Institutions.	Scholars.	Institutions.	Scholars.
1919-20	150	52,482	2,113	632,032	6,595	649,778	8,708	1,231,810	155,344	6,133,521
1920-21	160	48,170	2,184	600,583	6,739	653,942	8,923	1,254,525	159,345	6,327,973
1921-22	167	45,933	2,248	594,910	6,739	644,614	8,987	1,250,524	160,072	6,310,451

[3] Indian Education in 1920-21, p. 4.

Province.	National Schools and Colleges in 1921-22.		Approximate effect of "Non-Co-operation" on certain recognised institutions up to March 1921.			Remarks.
	Institutions.	Scholars.	Scholars.	Withdrawn from institutions.	Returned.	
Madras . .	92*	5,072*	1,71,111	820	†	
Bombay . .	189	17,100	42,416	2,350	239	
Bengal . . .	100	14,819	1,03,107	11,157	No information.	
United Provinces .	137*	8,476*	49,171	2,626	789	
Punjab . . .	60	8,046	1,11,078	1,300	481	
Burma . . .	92	16,218	36,875	13,031	747	
Bihar and Orissa .	442	17,330	23,190	1,826	†	
Central Provinces .	86*	6,338*	71,759	1,824	454	
Assam . . .	38	1,908	12,186‡	1,130	356	
North-West Frontier Province . .	4*	120*	41,342	*Nil*	..	
Minor Administrations	10	1,255	45,508	571	70	

* Opened till 31st July 1921.
† There was a general tendency to return.
‡ Till January 1921.

(*d*) National Institutions.

6. I have so far dealt with the destructive side of the movement. It was not, however, long before the parents of the absenting scholars demanded some form of education to take the place of that which their sons had foregone. The year 1921 saw the outcrop of a large number of "national" institutions, ranging from a Muhammadan University at Aligarh to the municipal primary schools at Surat. Some of these institutions were new, but many of them had been recognised schools and were "nationalised" by their managing committees, sometimes at the instance of the scholars themselves. The Municipality of Surat, for example, "nationalised" all its schools. The Government of Bombay was forced ultimately to suspend the operations of this body and to appoint a committee of management. A recent account says:—"There are in the town about 8,000 or 9,000 school-going children, and the managing committee claims that the number of its pupils has

risen from 1,700 to about 4,000 children, with a daily average attendance of 3,000. The non-co-operationists put their figure at 7,500, with a daily attendance of 5,500. * * * * *. On their own showing the non-co-operationists have succeeded only in dividing the school-children of the city into rival camps on a merely political basis. The section brought under their own wing is detached from the state-aided schools with the amiable motive of teaching the children to rebel against constituted authority. Whether they are taught anything of value is a subject on which no outside authority has any opportunity to pronounce; and it would be utterly inconsistent with the theories underlying national education to bring the matter to the test of any Government or university examination."[1]

(e) The meaning of 'nationalisation.'

7. The first step in the "nationalisation" of a school was the repudiation of Government grants and recognition. But the act of "nationalisation" was also held to signify some alteration in the character of the school. It is no exaggeration to say that, provided that the new schools did not interfere with the work and the discipline of existing institutions, Directors and others interested in education would have welcomed what purported to be the inauguration of a new educational experiment. Any such hopes were doomed to disappointment. The new schools, if they showed any distinctive features at all, showed none that were worthy of imitation. The two elements of "national education," on which the acknowledged leader of the non-co-operation movement, Mahatma Gandhi, had laid great stress, were the use of the *charkha* or spinning wheel and the encouragement of the vernacular. Spinning wheels were at first provided in many of the national schools, but an elementary knowledge of child nature is sufficient to explain their early disuse. Apart from the supreme dullness of this particular form of manual exercise, it has no educative value at all comparable with that possessed by other forms of hand and eye training; its disappearance from the curriculum is no matter for regret. The economic value of the *charkha* may be great, its educational value is negligible. There is little evidence that the vernacular was any more extensively used in the national schools than it is under the present regulations in recognised institutions. There is, on the other hand, clear evidence that many of the national schools gained a brief popularity by commencing the study of English at an earlier stage than is permitted by departmental regulations. In some of the institutions for older students, such for example as the National University at Aligarh, politics entered largely into the programme of studies. Apart from this, the curricula of the national institu-

[1] Times Educational Supplement, dated 16th June 1923.

tions differed very little from those prescribed by the Education Department. The teachers were all products of the recognised system and were only qualified to teach what they had learnt. Too often they were not even qualified to do this and the discipline of the new schools was notoriously lax. The best of the national schools have now sought and regained recognition and the number remaining must be a small fraction of those which are shown in the preceding table.

8. It would be tedious to follow the development of the movement from province to province, but the following account from Bengal may be taken as typical of its course.

(f) In Bengal.

9. As a result of the Khilafat agitation in August and September 1920 a strike took place in October at the Calcutta Madrasah. The backwash of this strike was felt at the Chittagong Madrasah, but it seems that the Mussalman element in the movement, seeing the lack of support at the time from Hindu sources, realised the disastrous effect of such a sectional upheaval, and in consequence, shrank from going to extremes. After the students' conference at Nagpur a sudden demand arose from the students of many colleges in Calcutta that the institutions should be nationalised. The students of the Central and Bangabasi colleges led the way. Excitement and intimidation were rife in certain areas of Calcutta, and largely as a precautionary measure the colleges of Calcutta, with the exception of the Bengal Engineering College, the Medical College, the post-graduate classes and the Law College, were closed. "This closure was criticised at the time as pusillanimous for it seemed clear that the demands as formulated were the demands of a small, very vocal, and highly organised minority, which, as in similar circumstances universally, was for a time able to impose its will upon an unorganised majority. It is significant in this connection that Presidency College, surrounded as it was by hostile pickets and crowds and subjected to constant endeavour to sap its loyalty, stood firm. In the end and in consonance with the action of other Calcutta colleges, Presidency College was closed. As a result, the loyal elements were no longer subjected to constant indignity and insidious argument, and the dispersal of students, whether well or ill-affected, to their homes brought them into contact with the moderating influence of age and experience. Further the hottest heads were given ample leisure to realise that the golden age promised them as a result of 'national' education was but a fantasy, since the network of *charkha*-spinning *plus* Urdu or Hindi teaching institutions refused to materialise, charm the agitator never so wisely."[5]

[5] Bengal, p. 91.

The picketing of colleges and schools was carried to such a length that the entrance to the examination hall was blocked against the ingress of the law candidates by rows of supine students. Only the most determined of examinees ventured to cross this barricade.

10. Outside Calcutta the acuteness of the situation seemed to vary directly in proportion to the distance of an institution from the capital. Thus at Rajshahi the work was only temporarily suspended, while at Dacca the students, though subjected to great pressure, resisted stoutly and the college was never completely closed. The net loss of the colleges appears to have been over 27 per cent. of the students who normally would have been promoted from the first and third to the second and fourth year classes, respectively. A curious feature is that the admission to the science departments of the colleges and post-graduate classes showed an increase in 1921. "This seems to support the assertion frequently made that the desertion was due in part, not to aversion from the system as a Government or Government-aided system, but to a growing and frequently expressed idea that the purely literary side of education has been overdone and that, as many of the students stated the case, it is 'science or nothing.'"[6]

11. The movement hardly affected the primary and middle schools at all but there was a fall of 23 per cent. approximately, *i.e.*, of 45,000 students, in the attendance at high schools. "Girls' schools have as yet little significance in the life of the people, and this obscurity has been of service to them in saving them from sharing, except in very minor degrees, in the attacks made on those for boys."[7]

12. There was a recrudescence of the movement in the winter of 1921-22 in the shape of a much more barefaced and cynical attempt to use the students and the school-boys as political tools. The activities of the non-co-operationists were directed towards a complete "hold-up" of normal city life on certain days. Their methods were the employment of so-called "volunteers" for the picketing of cloth and liquor shops and for the holding up of traffic, and the organisation of illegal processions for the purpose of courting arrest. As evidence that the movement, so far as it concerned students, was entirely divorced from educational considerations, may be adduced the fact that in the cases of strikes in Calcutta colleges, there was no accompanying demand for nationalisation; the reason given was generally that the strike was a protest against the action of Government or against the arrest

[6] Bengal, p. 92.
[7] United Provinces, p. 116.

of some particular leader. While it is admitted that the movement may have given rise to a more constructively critical attitude towards the present system of education yet its evil disciplinary effects are patent. In the end "political agitation seems to have tailed off into teaching bad manners to school boys."[8]

13. This episode in the history of Indian education is closed. It has not been without its valuable lessons to the educationist. It has brought to light evidence of a genuine dissatisfaction with the processes of education in India. It was due to the politicians that the attack was directed against the system of educational administration, and because the system, though capable of improvement, is on the whole suited to the country the attack failed. But strength was added to the attack by underlying discontent with the character of the education provided under this system. For this discontent, it would appear, in the subsequent pages that there is some justification. "It is probable that the large bulk of the students suddenly realised, to their intense pain and disappointment, that much of their education is ill-suited to their practical needs. While the professor was lecturing to them on the annals of the Holy Roman Empire, their thoughts were inevitably and irresistibly turned to the great liberal and national movements of the nineteenth century. In economics they desired to study the application of general principles to the problems of their own country instead of to those of distant lands. Students, both at school and at college, began to wonder whether they were being trained for life and for service or for mere success in the examinations, for it was the ideals of service that were uppermost in their minds."[9]

(*g*) The lessons of the Non-co-operation movement.

14. In short the educational organisation of India emerged triumphantly from the ordeal, but the crisis has left behind the conviction that our educational aims need re-statement. If the function of education is the adaptation of the future citizen to his environment, then the content of education must change in harmony with changes in that environment. The political and economic conditions of India have been undergoing change and the national school movement can at least claim that it lent strength to the advocates of educational reform.

15. One significant feature of the non-co-operation campaign was its disregard of provincial boundaries. Not only did its leaders claim for it an all-India character but their

(*h*) All-India character of the national school movement.

[8] Bengal, p. 96.
[9] Punjab, p. 18.

appeal did in fact evoke a similar response in the different provinces which they visited. On the other hand, the organisation of the resistance to their attack was left to the provincial educational authorities. This lack of co-operation in the defence was inevitable in view of the organisation of educational administration in India, more particularly in view of the political situation at the time of the attack, for the non-co-operation movement coincided with the introduction of constitutional reforms in India. Under the new constitution the autonomy of the provinces in educational matters was established by statute. Education was declared, under the Government of India Act of 1919, to be a "provincial transferred" subject, to be entrusted to the charge of ministers responsible to the provincial legislatures. The general significance of this change will be described in the following chapter. But there are certain aspects of "provincialisation" which call for mention in this introduction.

Education in India though provincial has many common features.

16. The first, the variety which characterises the provincial systems of education, has been dealt with in previous reviews. The fact that it is possible to compile, with some degree of accuracy, the numerous all-India tables which find place in the two volumes of this review shows that these variations are not as yet fundamental. It is true that primary schools may, in one province contain seven classes, in another four, that no two provinces in India have adopted the same system of grant-in-aid, in short that education in every province has its own distinctive characteristics: yet the general uniformity of the provincial systems is more pronounced than their variety. The same problems concerning the use of the vernacular medium, the recognition of high schools, the educational responsibilities of local bodies, etc., are questions of moment to each Director of Public Instruction.

It might with advantage have more.

17. It might be of advantage if in some non-essential matters there were greater uniformity. Comparisons of the educational activities of the different provinces would be more intelligible and reliable and the lessons of experience would be more easily transferable from one province to another if, for example, the nomenclature adopted for the different classes of schools and for the different school classes was the same in all provinces. Three provinces during the quinquennium have followed the recommendation of the Conference of Directors held in 1917 and numbered their school classes in sequence from the lowest to the highest, but elsewhere a great deal of variety exists as will be apparent from the diagram facing page 77. This example is quoted merely to illustrate the point that comparisons based solely on provincial statistics are apt to be misleading.

18. Three factors are likely to conduce to further differentiation, the transfer of education to the charge of provincial ministers, the multiplication of universities and the financial inequalities of the different provinces. It is as yet too soon to say how far the provincialisation of education will lead to the adoption of divergent policies. Hitherto the tendency has been for any popular measure introduced in one province, such as a primary education act or the abolition of the age-limit for matriculation, to be adopted or at least considered for adoption in other provinces. But it is inevitable and, in view of local circumstances, not undesirable that each province should develop its own educational policy. There are, however, certain matters of importance in which local or provincial variation would be dangerous to the cause of education. No one would desire to see any differences recognised in the value of the degrees conferred by different Indian universities. The importance of having some external criterion of the fitness of candidates for admission to the professions will be mentioned in the chapter on professional education. With the multiplication of universities, some of them situated at no great distance from each other, a real danger arises lest the pressure of competition may result in the lowering of the standard of university examinations. Already it is reported from Bihar and Orissa that there is a tendency for students to migrate to Calcutta in the belief that the requirements of the Calcutta University are less exacting than those of the University of Patna. It would be most unfortunate if in India, as in the United States of America, a degree ceased to possess any intrinsic value and was dependent for recognition on the status and reputation of the particular university by which it had been conferred. Again it is natural that a province should prefer to recruit its officers from among the people of the province, but, if this principle is extended to university appointments and academic distinction is subordinated to domiciliary qualifications, some deterioration in university standards must, especially in the smaller provinces, be the result. Any change in the standard set by the university is reflected in the standard of education provided in the schools.

Provincial differences inevitable and generally desirable.

Except in educational standards.

19. These are contingencies which it is impossible to ignore. But such provincial and local variations in systems and standards are subject to control by local Governments and universities. It is otherwise with variations which are due to the inequalities of provincial finance. The provincialisation of education was accompanied by the grant of a large measure of fiscal autonomy to the provinces. The following table shows the financial position and expenditure on education of the provinces in 1921-22.

Financial differences.

Province.	Population.*	Revenues.	Educational expenditure.	Percentage of educational expenditure to revenues.
		Rs.	Rs.	Rs.
Madras	42,318,985	11,74,88,517	1,42,51,598	12·1
Bombay	19,358,379	13,10,72,589	1,71,25,286	13·1
Bengal	46,695,536	8,32,44,177	1,18,76,621	14·3
United Provinces	45,375,787	10,01,55,348	1,51,41,029	15·1
Punjab	20,685,024	7,09,68,534	87,11,371	12·3
Burma	13,212,192	9,17,71,221	57,68,683	6·3
Bihar and Orissa	34,002,189	4,42,62,036	53,36,928	12·1
Central Provinces and Berar	13,912,760	4,71,87,880	53,68,308	11·4
Assam	7,606,230	1,81,53,434	23,13,822	12·7
North-West Frontier Province	2,251,342	62,86,291	12,13,331	19·3
Minor Administrations	1,679,227	1,08,54,216	12,54,193	11·6
TOTAL	247,097,651	72,14,44,243	8,83,61,170†	12·2

* Taken from general educational tables.

† Taken from Finance and Revenue Accounts of the Government of India for 1921-22. The total expenditure given in the general educational tables is Rs. 9,02,30,028. The discrepancy is due to the different systems of classification of expenditure.

And their effect.

20. The foregoing table requires no comment. It affords an explanation of the fact that Bengal, in some ways the most educationally advanced province in India, pays its teachers less than any other province. It shows why carefully devised schemes for the expansion of education in the rural areas of Bihar and Orissa must be held in abeyance: indeed it is reasonable to infer that, unless the revenues in that province can be made more commensurate with the number of its inhabitants, the time must come when Bihar and Orissa must be content with a system of education markedly inferior to that of a province such as Burma which with half its population has double its revenues. The financial inequalities of the provinces cannot but profoundly affect their educational policies. While Bombay with its large and growing revenues can contemplate the early and general introduction of compulsory primary education, it is out of the question for Bengal with its restricted and inelastic resources to consider any such project. Since a well-organised system of education is one of the most potent factors in economic, social and political development the ultimate effect of such provincial divergencies can hardly be over-estimated. But the present review

is concerned with the educational history of the past five years, not with a problematical future; and I have laid stress on these provincial differences only in order to warn the reader that generalisations about the conditions and progress of education in India must be adopted with some reservation and that comparisons based on provincial statistics must take account of provincial differences in organisation, finance and nomenclature.

Danger of generalisations about Indian education.

21. An account was given in the last quinquennial review of the effects of the war on Indian education. Though the war had still almost two years to run when the present quinquennium opened there is little to add to that account. The war did not appreciably affect school attendance. Except in isolated units such as the Bengali regiment and the Punjab University Signalling Section, recruits for the Indian Army were drawn chiefly from the rural and agricultural classes. Higher education in India did not suffer as in the principal countries which took part in the war. The following table borrowed from an American publication[10] is of interest.

Effect of the war on attendance.

Attendance at colleges and universities.

Countries.	1914.	1915.	1916.	1917.	1918.	1919.	1920.
United States .	..	..	..	457,488	411,110	423,477	440,069
France .	42,037	11,230	12,566	14,121	19,381	29,891	45,117
Germany . .	60,741	53,789	57,243	64,978	70,162	87,065	83,506
Great Britain .	..	36,503	20,722	20,748	32,445	47,686	73,705
India .	47,337	50,088	55,020	58,639	62,936	63,830	65,916

Not the least remarkable feature of the above table is the comparatively small loss sustained by the German universities. While the average loss in British colleges was 31·4 per cent. and in France 64·4 per cent., the figures for Germany (supplied from German official sources) never show a shortage of more than 10 per cent, while the average fall for the whole war is only 1·4 per cent. In India, while attendance at colleges was not directly affected by the war, there is some evidence that attendance at primary schools was actually stimulated. From the Punjab, for example, it is reported that those who returned from service overseas had learnt to appreciate the value of education. In 1918 on the occasion of the Silver Wedding of Their Majesties, Her Excellency Lady Chelmsford issued an appeal for a fund to enable the children of those who had been killed or permanently disabled in the great war to

The Silver Wedding Fund.

[10] Educational Review, Chicago University, April 1922.

proceed to higher education. The appeal met with a generous response and over thirteen lakhs were subscribed, chiefly by the women of India to whom the appeal was addressed. The Burma contribution of Rs. 1,34,697 was made by over a quarter of a million of women. More than a thousand scholars in middle schools, high schools and colleges now receive help from the Silver Wedding Fund. The Punjab Government had already instituted scholarships for the same class of children and after the inauguration of the Silver Wedding Fund they extended the benefits of their scheme to include the children of all who took active part in the great war. Owing to the large number of recruits which the province provided for the fighting forces the cost of these scholarships now amounts to three lakhs a year. The Madras Government have also instituted similar scholarships.

Economic consequences of the war.

22. Of the indirect effect of the war on education due to its political reactions I have already written. Still more serious, because more lasting in their consequences, were its reactions on the economic condition of India. The rise in prices affected education in two ways. It resulted directly in the withdrawal of a considerable number of scholars whose parents could no longer afford to keep them at school; to this cause, rather than to non-co-operation, may be assigned the fall in some provinces in the attendance at primary schools. But the effect on educational finance of the rise in prices was even more serious. It necessitated a general revision of the pay of the teaching staff which absorbed the funds needed for educational expansion. This is reflected in the rise in the cost of schooling as shown in general tables II and IV from which the following figures have been taken.

(i) *Average annual cost per scholar in recognised institutions.*

Year.	General Education.			Special Education.			Total.
	Arts Colleges.	Secondary Schools.	Primary Schools.	Professional Colleges.	Training Schools.	Other Schools.	
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
1916-17	152	28	5	318	157	38	11
1921-22	241	40	8	436	212	77	18
Increase per head .	+89	+12	+3	+118	+55	+39	+7

Of the increased cost the largest share was met by Government.

(ii) *Total expenditure on education, by sources.*

Year.	Expenditure from				Total Expenditure.
	Government Funds.	Board Funds.	Fees.	Other Sources.	
	Rs.	Rs.	Rs.	Rs.	Rs.
1916-17 . .	3,91,62,853	2,23,17,618	3,18,71,138	1,95,31,459	11,28,83,068
1921-22 . .	9,02,30,028	2,47,31,150	3,80,08,648	3,07,83,143	18,37,52,969
Increase . .	+5,10,67,175	+24,13,532	+61,37,510	+1,12,51,684	+7,08,69,901

It must be remembered that in addition to the share of the increased cost of schooling which was met by Government, provincial revenues had also to bear the cost of increases in the pay of the inspecting staff, the expenditure on which rose from Rs. 50 lakhs to Rs. 80 lakhs though the number of officers employed fell from 2,209 to 2,197.

Influenza and famine.

23. The year 1918-19 was marked by a terrible epidemic of influenza which is estimated to have carried off five millions of lives throughout India and which caused grave dislocation in the work of the schools and colleges. The same year also witnessed a widespread failure of crops which seriously affected school attendance.

Statistical Progress.

24. In spite of the various adverse factors, political and economic, there is considerable advance in education to record during the quinquennium. The following extracts from the general tables included in the second volume give a conspectus of the numerical advance:—

(i) *Institutions and Scholars.*

Type of Institution.	Institutions.			Scholars.		
	1917.	1922.	Increase or decrease.	1917.	1922.	Increase or decrease.
Arts Colleges . .	134	167	+33	47,135	45,933	—1,202
Professional Colleges. .	61	64	+3	11,504	13,662	+2,158
Secondary Schools .	7,693	8,087	+1,204	1,186,335	1,239,524	+53,189
Primary Schools . .	142,203	160,070	+17,867	5,818,730	6,310,400	+491,670
Special Schools . .	4,861	4,011	—850	143,604	132,706	—10,898
Unrecognised Institutions	37,803	34,807	—2,996	644,638	639,125	—5,513
Total .	192,755	208,106	+15,351	7,851,946	8,381,350	+529,404

Note.—If the unrecognised institutions are not taken into account, the increase in the number of public institutions amounts to 18,347 and that of their scholars to 534,917.

(ii) *Scholars according to stages of instruction.*

Stage.	1916-17.	1921-22.	Increase or decrease.
College stage	57,972	58,837	+865
High stage	216,160	218,606	+2,446
Middle stage	385,372	434,810	+49,438
Primary stage	6,404,200	6,897,147	+492,947
Special Schools	143,604	132,739	—10,865
Unrecognised institutions . . .	644,638	639,125	—5,513
TOTAL .	7,851,946	8,381,264*	+529,318

* Excludes 86 Scholars reading purely classical languages.

(iii) *Scholars according to sex, race or creed.*

Community.	1916-17.			1921-22.		
	Males.	Females.	Total.	Males.	Females.	Total.
Europeans and Anglo-Indians.	22,419	20,126	42,545	22,987	21,651	44,638
Indian Christians. .	129,724	80,589	210,313	162,293	101,538	263,831
Hindus . . .	4,014,849	664,111	4,678,960	4,154,863	751,021	4,905,884
Muhammadans . .	1,540,508	281,432	1,821,940	1,616,448	349,228	1,965,676
Buddhists . . .	429,	110,054	540,448	405,332	103,806	509,138
Parsis . . .	10,678	6,226	16,904	10,512	6,558	17,070
Other Communities .	93,045	14,387	107,432	120,529	16,244	136,773
Depressed classes .	380,510	52,894	433,404	469,878	68,376	538,254
TOTAL .	6,621,527	1,230,419	7,851,946	6,962,842	1,418,422	8,381,264

(iv) *Expenditure on Education according to objects.*

Objects of Expenditure.	1916-17.			1921-22.		
	For Males.	For Females.	Total.	For Males.	For Females.	Total.
	Rs.	Rs.	Rs.	Rs.	Rs.	Rs.
Arts Colleges .	69,23,617	1,80,131	71,03,748	1,07,08,923	3,33,415	1,10,42,338
Professional Colleges.	35,52,734	46,684	35,99,418	57,59,995	2,17,519	59,77,514
Secondary Schools.	2,79,41,432	39,87,750	3,19,29,182	4,22,17,448	65,09,457	4,87,26,905
Primary Schools	2,51,57,789	41,55,756	2,93,13,545	4,33,47,444	75,60,663	5,09,08,107
Training Schools	22,34,900	6,28,910	28,63,810	46,62,852	12,01,248	58,64,100
Other Special Schools.	41,89,537	2,87,579	44,77,116	73,51,009	4,86,485	78,37,494
University .			25,51,925			73,40,578
Direction .			8,92,263			13,99,110
Inspection .	3,35,96,249		49,64,587	5,33,96,511		79,36,408
Scholarships .			21,65,718			31,76,089
Buildings, etc. .			1,37,08,740			1,97,60,544
Miscellaneous .			93,13,016			1,37,83,782
TOTAL .	7,00,00,009	92,86,810	11,28,83,068	11,40,47,671	1,03,08,787	18,37,52,069
	+3,35,96,249			+5,33,96,511		

NOTE.—The table shows an all round increase amounting to Rs. 7,08 69,001 during the quinquennium.

Increase of scholars disproportionate to increase of

25. The foregoing tables disclose one general characteristic of educational development during the quinquennium, an increase in the number of scholars by no means commensurate with the increase in the number of institutions. This phenomenon is common to university, secondary and primary education, but it is due in each case to a different cause. The number of universities has doubled because the older universities had outgrown all reasonable limits. The work of the universities of Calcutta and Allahabad has now been lightened by the opening of new universities serving outlying provinces and large centres formerly included under their jurisdiction. A similar tendency towards the formation of smaller university units is evident in the Punjab and Madras. The change has therefore been in the direction of partition with a view to improved efficiency (*vide* paragraphs 76*f*). The increase in the number of secondary schools is titular. In the Punjab and the North-West Frontier Province the ordinary five-class primary schools have been reclassified, the smaller schools remaining primary institutions with four classes only, the larger schools being converted into six-class lower middle (or secondary) schools, of which nearly

(*a*) Universities;

(*b*) Secondary Schools;

500 came into existence. The object of this change was to reduce within more reasonable limits the work of the master in sole charge of a single-teacher primary school and at the same time to provide a natural form of development for the larger primary schools. But there has also been in some provinces, notably in Bengal, a more generous recognition accorded to secondary schools under private management. Many of these have indented on older institutions for the bulk of their scholars. For these two reasons the increase in the number of secondary institutions, shown in the foregoing tables, does not imply a corresponding increase in the facilities for secondary education. Where primary education is on a voluntary basis, expansion beyond a certain point means the establishment of schools in backward areas where only a meagre and fluctuating attendance can be expected. This point has been reached in some of the less advanced provinces of India, for example in the North-West Frontier Province, where the attendance at some of the schools recently opened has been very poor. It is perhaps too much to expect missionary zeal of the ordinary village teacher sent to an unpromising centre of learning, for success in what he is apt to regard as a penal station may indefinitely delay his return to civilization. But here also a tendency to accord a too generous recognition to venture schools has been noted. Where reliance is placed upon the aided school in preference to the board school, a redundancy of small schools is the probable result. The average size of a primary school ranges from 42 (in the North-West Frontier Province) to 61 (in the United Provinces) in those provinces which rely on board chools, as contrasted with 28 (in Bihar and Orissa) to 40 (in Assam) in the provinces which rely on the aided system.*

(c) Primary Schools.

26. Considerations of space prohibit the inclusion in this introduction of any lengthy summary of the progress recorded in the following chapters, such as has been included in previous reviews. Mention only will be attempted of those changes which indicate fresh lines of development or suggest lessons for future guidance.

University education: growth of unitary teaching universities.

27. The future of university education has been profoundly affected by the publication of the report of the Calcutta University Commission. The unitary teaching university is now an established fact. Recent university legislation has shown that where the form of the affiliating university has been retained it has been retained of necessity and not of choice. There are signs that the conception of university life as connoting something more than mere residence in an individual

*N.B.—Madras (grant-in-aid) with 41 and Bombay (Board schools) 62 have been excluded as many of their primary schools contain middle classes.

college, with its restricted opportunities for culture and research, is being increasingly realised. But India was studded with isolated colleges before the new idea took shape. Some of these will develop into universities; for the others the Commission held out no future but reduction to the status of intermediate colleges. Only in a few instances is this recommendation likely to be carried into effect; and together with the multiplication of unitary universities a reorganisation of affiliating universities is also to be expected. The Allahabad and Madras universities have already led the way. This reorganisation will include, if these two precedents are followed, a reconstruction of the administrative machinery of the university, by which an elective majority will be introduced into an enlarged senate and a professional body will be set up to deal with purely academic matters; it will also provide for co-operation between the colleges in teaching and for a larger assumption by the university itself of teaching functions.

Some colonial university statistics.

28. Some public distrust has been shown of the policy of multiplying universities. But this policy does not in itself imply any change in the standard of university teaching, since the great majority of university students have in the past been wholly dependent on their colleges for their education, and have in fact had no relations with the university except attendance at its examinations. Provided that the new universities maintain, in their courses and examinations, standards at least as high as those established by the older institutions, then the multiplication of new university centres must be wholly in the interests of higher education and research in India. In Canada with a population of 8,788,483 there were last year 23 universities with an attendance of 34,720 students, of whom 9,000 were women. In Australia which has a population of about 5½ millions, there are half a dozen universities with a total enrolment of about 9,000 students. In South Africa, with a colonial population of one and a half millions, there are four universities with some 3,000 students.

Secondary education. (i) The medium of instruction.

29. In secondary education the most noteworthy developments have been the more general introduction of the vernacular medium and the growing demand for vocational training. The use of the vernacular as the medium of instruction has been supported both by publicists on sentimental or patriotic grounds and by teachers on educational grounds, since it is natural that a child should receive his early instruction in his mother-tongue. When English education was first introduced into India it was never intended that it should replace the vernacular as the ordinary medium of instruction. On the contrary, as the Despatch of 1854 says, it was expected

that masters and professors who had, through English, access to the latest improvements in knowledge should "impart to their pupils through the medium of their mother-tongue the information which they have thus obtained. At the same time," say the Directors, "and as the importance of the vernacular languages becomes more appreciated the vernacular literatures of India will be gradually enriched by translations of European books or by the original compositions of men whose minds have been imbued with the spirit of European advancement, so that European knowledge may gradually be placed in this manner within the reach of all classes of the people."[11] It cannot be said that the hopes of the Court of Directors have been fulfilled. There is little incentive for Indian scholars of repute to translate European books of learning into the vernacular, since only those who are well acquainted with English are competent to appreciate them; their original compositions they naturally produce in that language which will command the largest public. It is gratifying to find that an increasing number of Indian scientists obtain recognition of their work in the leading scientific journals of Europe. Even in the lower stages of education the tendency has been to lay too much stress upon English because of its great practical use as a medium or *lingua franca* in a land with over one hundred and forty vernaculars. But the dearth of a vernacular literature due to the lack of a reading public is a serious handicap to the encouragement of literacy among the masses—for after all only 2,289,188 men and 238,162 women of India are literate in English.

(ii) Difficulties in introducing vocational studies.

30. The problem of vocational education is not one which the educationist alone is competent to solve. The insistent demand for increased facilities for technical training is indicative rather of a desire for employment than of a desire for education. Such experiments as have been made with the introduction of vocational subjects into the general school curriculum have met with but indifferent success owing, firstly, to the lack of subsequent opportunity for the scholars to use the training given and, secondly, to their disinclination to enter anything in the nature of a blind alley. It is interesting to note that the same objection to premature specialisation is found in America: "The average American parent has little toleration for any plan or any course in education which closes the way for his boy or girl to the highest attainment. This is true even though only the occasional student may care to demand the advanced opportunity. Many high school pupils fail to know even at the time of graduation, to say nothing of the beginning

[11] Selections from Educational Records, Part II, p. 368.

of their course, whether or not they may decide to go on to college." There is, however, much to be said for a movement which would regard secondary education "as something to be adapted to the needs of young persons of ages 12 to 18 years approximately rather than something whose contents and methods should be determined by the fact that its students are expected at entrance to have completed the prescribed routine of a certain number of grades and are expected at graduation to meet the arbitrary entrance requirements of higher institutions."[12]

31. To revert to the obstacles to vocational education, it would seem natural before introducing any practical subject into a school curriculum to ascertain whether there is any opening for the boys who undergo training to practise this vocation profitably; in fact some connection should first be made between the school and the employers and some enquiry instituted into the nature of the occupations followed by ex-scholars who do not proceed to the university. The need for these preliminary steps is too often overlooked.

32. The second obstacle, the reluctance of the scholars to decide early on their future career, may be illustrated from the history of recent attempts at agricultural education. Agriculture is the most important industry in India, and here there is no question of the lack of subsequent opportunity. Agricultural colleges have always attracted a certain number of students who hope to obtain employment in the Agricultural Department, that is to say would-be Government servants and not would-be agriculturists. They have within the last few years succeeded in attracting an increasing number of the sons of well-to-do agriculturists to whom the potentialities of scientific agriculture have appealed. But the total number of students at agricultural colleges in India is only 967 and it can never represent more than a very small fraction of the rural population. Special agricultural middle schools have been opened in some provinces. These institutions have attracted few scholars and those not of the best quality. The son of a poor agriculturist who proceeds beyond the primary stage has no ambition to revert to his hereditary profession. Agriculture without capital, agriculture as he has seen it carried on by his father, offers few attractions to an intelligent schoolboy. Consequently the most successful experiments in agricultural education appear to be those which include agricultural teaching in the ordinary curriculum of the rural school, thereby not debarring boys of real ability from proceeding to higher education while ensuring that those who, through failure at examinations or lack of other openings, return to the land do so with a more skilled knowledge of their

Illustrated from history of agricultural education.

[12] The School Review, Chicago University, April 1921.

future occupation. For better opportunities to apply that knowledge they must look for the necessary capital and help to the co-operative society. The close connection between rural education and rural co-operation has been pointed out by several writers.* One happy outcome of the co-operative movement in recent years has been the spread of adult education in villages. This interesting and valuable contribution of co-operation to education is as yet in its initial stages but the promising start made in Bengal, Bombay and the Punjab encourages hope of its future development.

Co-operation and adult education.

Primary education.

33. The quinquennium does not disclose much change in the content of primary education. Nor, taking India as a whole, does it record any general advance in the battle with illiteracy. As ascertained at the Census of 1921, the number of literates in India was 22,623,651 (19,841,438 males and 2,782,213 females) or, in other words, 72 per mille (122 in the case of men and 18 in that of women). These figures show a slight improvement since the Census of 1911 when the number of literates in India was computed to be only 59 per mille, *i.e.*, 106 for men and 10 for women; but they are less than might be expected from the numbers under instruction.

(*a*) Progress in literacy.

(*b*) Value of proceeding by plan.

One lesson may perhaps be read from the provincial reports, the advantage of proceeding in accordance with a carefully devised plan. Only the adoption of such a plan can ensure the equalisation of educational opportunity and guarantee that such provincial funds, as are available, are used to the best advantage. The Government of India resolution of 1913 on Indian educational policy recommended that advance should be by means of board schools directly managed by local bodies, but financial necessity has prevented the general adoption of this system. In some provinces, as in the *panchayati* union school system of Bengal, it has been partially adopted with considerable success. A plan of campaign has the notable advantage that it allows for a detailed estimate to be made of the cost of expansion so that this cost may be apportioned in advance between provincial and local funds. The method in which the cost should be apportioned has been much discussed. The payment of purely proportionate grants results in flagrant inequalities; for there is no correspondence between the income of a local body, actual or potential, and the number of children of school-going age for whose education it is responsible. The solution of this problem depends ultimately on the decision of a much larger issue—the relative responsibility of the provincial government and the local area for the provision of primary edu-

* "The Wealth and Welfare of the Punjab," by H. Calvert, B.Sc., I.C.S. "An Introduction to co-operation in India" (India of To-day Series, Vol. I), by C. F. Strickland, I.C.S.

cation—a question which requires fuller consideration than it has received in the past. The working, or rather the neglect, of the recent education acts has made one thing clear—if compulsory education is to be introduced on any wide scale the initiative must come either directly or indirectly from Government. The advantages of its early introduction are undeniable. Not only would it ensure full classes and regular attendance, but it would prevent the present lamentable wastage of scholars who leave school before reaching the stage of literacy. Since this evil was particularly brought to the notice of local governments by the Government of India in 1918, considerable thought has been devoted to the problem but no effective remedy has been suggested except compulsion.

Relapse into illiteracy.

34. Even were a compulsory system of education in force in India there would inevitably be a considerable lapse into illiteracy in rural areas.

"The village boy when he leaves school in Bengal and takes his share in the cultivation of his father's land has very little inducement to keep up his knowledge, even the most elementary knowledge of reading and writing. He reads no books or newspapers, and hardly ever even sees the written word. The family keeps no accounts, no shopkeeper's name is inscribed over the few shops to be found in rural areas, no articles for sale are marked with the price, and there are no hoardings. Not even an advertisement catches his eye. The only written or printed papers which are to be found in a cultivator's house are the rent receipts given by his landlord, a document or two which has reference to his land written in legal phraseology in such a manner that it is the last thing a stumbling reader would wish to tackle, and perhaps some copies of evidence or a judgment in English in some case in which he has been an interested party. The newspapers published in the towns have a very small circulation in the towns themselves and none outside, partly for the reason that the topics upon which they are exercised generally refer to party faction in which but a limited number of persons of the town itself are interested. They contain nothing of interest to the villager. In the circumstances it is inevitable that there must be much lapse from literacy.

"An attempt was made to discover the bearing of the census figures on the extent of lapse from literacy, but it proved abortive. The census figures do not in fact indicate that there is any great lapse from literacy in Bengal. The result may be partly explained by the fact that a number of men employed as *durwans* and peons and in other capacities in which they are kept waiting about for long periods without much to occupy them, do teach themselves to read after they have reached maturity. Such persons are the employees of persons who use

the art of letters, they realize the advantage of being able to read and write, appreciate the fact that they can only rise higher in the employment of their masters by acquiring some education and take steps to do so. In Eastern Bengal moreover a bearded Muhammadan school boy is not a very uncommon sight, and a class in a vernacular school often includes one or two whose age is half as much again as the average for the class. But still the conclusion is inevitable that the return of literacy in adult ages is not accurate. The man who reached the census standard of literacy when he was at school will not admit that his knowledge has slipped from him, and perhaps, not having tried his hand for a very long time, is quite unconscious that this has happened. The enumerator has no time to examine each person he enumerates, and adults would resent any attempt on his part to do so. He can read and write himself and very often he has known those whom he is to enumerate all his life. He remembers that so and so was at school in the same class as himself or his brothers and assumes that he has retained his knowledge as he himself has retained it. The fact that the prescription of a standard of literacy for the first time at the Census of 1911 made little difference in the proportion of literates over the age of 20 though it made some at earlier ages, points to the probability that the standard is not strictly applied to adults, and the conclusion is inevitable that the census statistics gravely exaggerate the number of adults who are literate."[13]

Female education

35. Although the statistics recorded of the education of Indian girls are in no way remarkable there is evidence from several provinces that the attitude of the public towards female education is changing. The Bombay Legislative Council in 1921 opened the franchise to women. It is impossible that a body which has sanctioned such an advanced measure, should be content with an attendance at school of only 2 per cent. of the female population of the Presidency.

Education of special communities.

36. The problem of European education remained unsettled at the close of the quinquennium, as did indeed many problems concerning the future of the Anglo-Indian community. On the other hand, there was a very satisfactory increase in the number of Muhammadans receiving education, though this was in part accounted for by the establishment or recognition of special Muhammadan schools in Sindh and the United Provinces. These schools serve in the first instance to attract Muhammadans to secular education, but if allowed to tempt the community from giving its children the better education provided in public schools they are a doubtful boon.

Professional and technical education.

37. The adoption of a policy which aims at the increasing employment of Indians in the higher branches of the public

[13] Bengal Census Report, 1921, pp. 288-289.

service has led to a demand for facilities for higher professional education in India. This demand, which is entirely reasonable, has been recently endorsed by the committee which sat, under the chairmanship of Lord Lytton, to consider the position of Indian students in England. Although the committee recognised that ambitious students would continue, as indeed they do in all countries, to go abroad after their college courses to obtain a wider experience, they recommended the development of the professional and technical colleges in India and a survey of the resources in India for practical training. A conference of principals of engineering colleges, which met in 1921, saw no reason why education in engineering up to the highest standard should not be provided in India. The obstacles in the way of such development, which have led, for example, to the postponement of the projects for a school of mines at Dhanbad and for the extension of forestry training at Dehra Dun, are chiefly financial. Professional education is the most expensive of all forms of education. Indeed the successful training of specialists in some of the higher branches of technology, for which the demand is always limited, must be dependent on some form of co-operation between the provinces. Already the smaller provinces rely on their larger and wealthier neighbours for the training of their students in medicine and engineering. If technological and professional training is to be developed to the highest standard in India it can only be by means of such co-operation.

Commercial and Industrial education.

38. The chief lesson of recent experiments in commercial and industrial education appears to be the supreme importance of the environment. The success of such institutions as the Sydenham College of Commerce and the artisan schools at ordnance factories shows what may be accomplished when employers of labour and educational authorities work together, and when opportunities for employment surround the scholar.

Conclusion.

39. The straitened finances of the central and local governments of India at the present time preclude any hope of striking educational developments in the immediate future. The new provincial ministries of education, after successfully combating the attack on their schools, are now taking stock of their educational position with a view to systematic advance when the necessary funds are forthcoming. In such an advance, it is evident from the keen interest shown by the new Councils, they will have the support of public opinion. One lesson the history of the last five years has taught us, that if changes in the Indian educational system are needed they must be introduced gradually to suit the changing conditions of Indian life. There is no short cut to educational reform.

CHAPTER II.

ADMINISTRATION AND CONTROL.

Education under the Reforms. (a) Provincialisation.

40. With the introduction of the constitutional reforms in January 1921 Indian education became a " provincial transferred " subject. By declaring education to be " provincial " the Government of India Act did little more than state and define the existing position. Although the central Government had in the past convened educational conferences and issued circulars and resolutions on educational policy, yet provincial governments had been responsible not only for the administration of local institutions but also for the development of their own educational systems. For example, on such questions as the control and finance of secondary education, the provision of free primary education and even the introduction of compulsory education, provincial governments had been free to adopt, and had in fact adopted, different policies. It was only when legislation was involved (and education in India is singularly unfettered by legislation) or when appointments were to be made to the Indian Educational Service or when schemes were proposed involving large expenditure, that a provincial government required the authority of the Government of India. The effect of the " provincialisation " introduced by the Reforms has been chiefly financial. While the finances of India were centralised it was possible for the Government of India to encourage advance on the lines which it favoured by grants for particular objects from its surplus revenues. With the provincialisation of financial control the influence so exercised by the Government of India has ceased.

(b) Educational responsibilities of the central Government.

41. But the provincialisation of education has not deprived the Government of India of all its educational functions. It still remains directly and financially responsible for education in certain minor Administrations such as Ajmer, Coorg and the North-West Frontier Province. These little provinces have a total population of about four millions and vary in educational importance from penal settlements like the Andamans to civilised centres such as Delhi. The Government of India further manages a few institutions of a special type such as Chiefs' Colleges. Three universities, the Benares Hindu University, the Aligarh Muslim University and the Delhi University are " central " subjects under the Government of India and the Governor General is Rector or Visitor of six other universities in British India, in which capacity he possesses the right of visitation. His sanction is required for the recognition of the equivalence of degrees and of

examinations qualifying for admission to the Dacca, Lucknow, Rangoon, Delhi, Benares Hindu and Aligarh Muslim universities. In addition all legislation for the incorporation of new universities and (for a period of five years) for the Calcutta University is subject to legislation by the Central Legislature. This reservation is due in part to the importance of such legislation, in part to the fact that a university area may exceed the limits of the province in which the university is situated. The Calcutta University, for example, controls colleges and higher education in Assam as well as in Bengal, while the area under the Allahabad University includes the Central Provinces, Central India and Rajputana.

The Central Advisory Board.

42. In order to assist the Governor General in the exercise of his functions as visitor and to give advice on questions of educational policy and practice referred to it either by the Government of India or provincial governments, a Central Advisory Board of Education was established by the Government of India in 1921. The Educational Commissioner with the Government of India is chairman of the Board which includes two Vice-Chancellors of Indian universities, two principals of colleges under private management, four Directors of Public Instruction and four non-officials interested, but not immediately engaged, in education. The members of the Board at the time of its first meeting in February 1921 were:—the Educational Commissioner with the Government of India, Mr. P. J. Hartog, C.I.E., Vice-Chancellor of the Dacca University, The Hon'ble Sir Chimanlal Harilal Setalvad, Kt., Vice-Chancellor of the Bombay University, the Revd. E. M. Macphail, O.B.E., Principal, Christian College, Madras, Mr. W. B. Patwardhan, Principal, Fergusson College, Poona, Mr. J. G. Covernton, C.I.E., Director of Public Instruction, Bombay, Mr. (now Sir) C. F. de la Fosse, C.I.E., Director of Public Instruction, United Provinces, Mr. G. Anderson, C.I.E., Director of Public Instruction, Punjab, Mr. A. I. Mayhew, C.I.E., Director of Public Instruction, Central Provinces. The Hon'ble Mr. Srinivasa Sastri Avargal, Member of the Council of State, the Hon'ble Sir Surendranath Banerjea, Minister for Local Self-Government, Bengal Presidency, the Hon'ble Mian Fazl-i-Hussain, Minister for Education, Punjab, and Dr. Zia-ud-Din Ahmad, C.I.E., Principal, M. A. O. College, Aligarh.

43. The Board held four meetings during the period under review and considered and offered advice on a number of important questions including vocational education, the standardisation of examinations and the introduction of mental intelligence tests in India. The Bureau of Education, of which the Educational Commissioner is in charge, acted as

The Bureau of Education.

the secretariat of the Board. It also supplied information on educational subjects to a number of enquirers resident in India and abroad and published a variety of reports and pamphlets,* including an annual narrative of the progress of education in India and two volumes of selections from the early records of education under British rule.

Need for central advisory agencies.

44. It is probable that the need for such central agencies as the Central Advisory Board and the Bureau of Education, able to collate for the benefit of the provinces educational experience derived from the whole of India, will be more fully realised when the intense feeling of provincial independence, which was engendered by the reforms, has abated. The following passage from the Punjab report shows that this need is already felt:—"One of the main objects of the Reforms was the substitution of the direct and personal control of the Minister (who is responsible to the Legislative Council) for the distant and official control hitherto exercised by the Government of India. The change has been beneficial, except in one respect. There is a growing danger of an exaggerated form of provincialism in education which, if not checked at the outset, may have disastrous results. No Indian province can live unto itself. Universities of the modern type transcend provincial limits. Indian scholars, proceeding overseas, carry with them the reputation of India in the world of learning. There is also a danger of a serious and extravagant overlapping between the several provinces, especially in the region of higher education. There are also a number of vexed questions on which an all-India and not a provincial solution is sought. On all such questions a decision by a single province may gravely embarrass other provinces. The question also arises whether India is tending in the direction of the United States of America or of the Disunited States of Europe. The development (or not) of an Indian policy of education will have much to do with the answer to this momentous question. There is thus a grave need for some central body which can discuss matters without interfering unduly with the autonomy of the provinces. To some extent this need has been met by the Central Advisory Board to the Government of India."[1] Similar views are expressed in the Assam report:—"With the transfer of educational control from the central to the local government, education in the province tended to lose the advantage which it drew from the submission of its larger schemes to an authority commanding a wider outlook. Such benefits however as accrued from the relationship have been preserved for the provinces by the constitution of a central advisory board under the charge of

* See list at the end of the present volume.
[1] Punjab, p. 12.

the Educational Commissioner with the Government of India. The proceedings of the board have hitherto been stimulating and helpful. They keep the department in touch with effort and success in other provinces and may serve to correct the natural tendency of a small province in isolation from its neighbours to pass from the provincial to the parochial and respond too readily to local impulses."[2]

(c) The "Transfer" of Education.

45. The "transfer" of Indian education introduced a more significant change. Indian education has by the Government of India Act been entrusted in each province to the charge of a Minister responsible to the provincial legislative council, of which he is himself an elected member. It is thus placed directly under popular control. No single Minister in any province has been made responsible for all forms of education. European education in the first place was excepted by the Government of India Act and left in charge of a provincial "Member of Council", whose tenure of office is not dependent on the support of the legislature. Again, certain forms of technical education have been transferred to technical departments and fall under the control of the ministers in charge of those departments; thus engineering education has been placed in several provinces under the Minister for Public Works. Even general education has not in all provinces been left intact: in the United Provinces primary education has been placed under the Minister for Local Self-Government.

Distribution of Educational control.

46. It is thus possible to find in a single province European education, secondary education, primary education and technical education each in the charge of a different member of the local Government, while university education is more directly controlled by the Governor of the province in his capacity as Chancellor of the local University. The wisdom of such a division of control was criticised in anticipation by the Calcutta University Commission. Dealing with a suggestion that the Agricultural and Commercial Departments should continue to act independently until they had further developed and should then put their educational efforts under the Education Department they write:—"One is inclined to ask whether the suggestion that, in the war against ignorance, the advance of the agriculturists and the commercialists should take place independently of the rest, and there should be no headquarters organisation until they have obtained success is not a little like a suggestion in the military sphere that the artillery and the cavalry should each fight independently of the infantry, and that no general staff should be appointed until they were victorious. They never would be

[2] Assam, p. 16.

victorious; because a general staff and a plan of campaign are the first indispensable requisites of success in the war against ignorance as in other forms of warfare."[3]

The Legislative Councils.

47. Although the administration of education in the provinces is governed only by departmental codes and regulations and very little by legislation, yet the provincial legislatures under the reforms exercise a very real control over educational policy. In the first place, education being a transferred subject the education estimates are subject to the annual vote of the council. The occasion of the budget debate on these estimates is usually taken by members for an expression of their views on the educational policy of the government. These opinions are further expressed in the form of resolutions on educational questions, which, if passed by a majority in the council, possess the force of strong recommendations to government to take particular action in certain matters. Marked interest has been shown by the new councils in education; and though the questions asked have generally been of local and personal interest, the resolutions have shown the importance which the new legislators attach to this subject. The new council in Bihar and Orissa, to give one instance, had during the first year of its existence discussed no less than seventeen resolutions on educational topics as the result of which committees have been appointed to consider the whole question of secondary and primary education in that province. Elsewhere resolutions were passed with the object of providing more funds for primary education, of furthering vocational and technical education, of reserving a proportion of the places in Government institutions for members of particular communities and of removing the age restriction for matriculation.

In the central legislature resolutions in favour of extending the benefits of Rhodes scholarships to India and recommending the creation by the Government of India of additional scholarships for foreign study have been passed.

48. The transfer of education took place at a time not only of considerable financial stress but also of disturbance in the educational world. The first task of the new authorities was to defend the educational system from the attacks of political malcontents. By the close of the period under review the time of trial had passed and it was possible for them to consider the development of provincial educational policies which, however, can only be fully realised when the financial horizon has lightened.

[3] Calcutta University Commission Report, Vol. III, Chapter XXVIII, p. 243.

49. The position of the Director of Public Instruction under the Reforms has so far been altered that he is no longer responsible for the defence of the educational policy of Government in the local council, of which he is not indeed in all cases a member. He remains as the administrative head of the department and technical adviser to the Minister. In the Punjab he has also been entrusted with the duties of Secretary for Education to Government; the considerable economy thus effected in the number of secretariat officers and clerks has enabled the office of the Director to be strengthened by the appointment of expert officers dealing with different branches of education. A similar arrangement has recently been introduced in the Central Provinces. "The most direct and the most immediate effect of the Reforms has been the strengthening of the contact between the Department and public opinion. This has been brought about, directly, by the responsibility of the Department to the Minister who is himself responsible to the Legislative Council; and indirectly, by the knowledge within the Department that every request for a grant and every development of educational policy may, some time or other, be subjected to vigilant scrutiny by the Council."[4] The Director under the Reforms.

The Educational Services.

50. For the administration of education the Department of Public Instruction is immediately responsible. The personnel of the Department consists of members of the Indian Educational Service, the Provincial Educational Service and the subordinate services. The whole character of the Indian Educational Service was altered in December 1919 as a result of the report of the Royal Commission on the Public Services. It was originally intended that the Indian Educational Service and the Provincial Educational Service should be equal in status, the former recruited in England by the Secretary of State and the latter recruited in India by local Governments. The pay of the former service was on a time-scale rising from Rs. 500 to Rs. 1,000 per mensem with a few allowances for senior officers or attached to special posts. The constitution and pay of the Provincial Educational Service differred in different provinces, but it was ordinarily a small service containing posts of various grades from Rs. 200 to Rs. 600. The difference in pay between the two services was intended to mark the difference in domicile of the European and Indian recruits. In the course of time the Indian Educational Service had come to be regarded as the superior service; so much so that a few persons of Indian

[4] Punjab, p. 10.

Re-distribution of posts in the Indian and Provincial Educational Services.

domicile had actually been appointed to it. In the scheme of re-organisation effected in 1919 this change in the relations of the two services was definitely recognised. The Indian Educational Service was constituted the senior educational service in India, and, in accordance with the accepted policy of increasing the association of Indians in the higher ranks of the administration, it was decided that new recruitment should be directed towards the equalisation of the number of Europeans and Indians in this service. In order to accelerate the attainment of this object a 33 per cent. increase in the number of posts in the Indian Educational Service was at once made by the transfer from the Provincial Educational Service of all those posts which, but for the fiction of the equality of the two services, would, by their nature, have been included in the senior service. The transfer of these posts was in the majority of cases accompanied by the transfer of their incumbents. Appointments to the Indian Educational Service are still made by the Secretary of State but recruitment is no longer confined to England. Nominations of Indian candidates are made by local Governments on the advice of local selection committees and of European candidates by the Secretary of State after selection in England. The initiative in either case rests with the local Government, which makes its recommendations either for local or for European recruitment when it reports a vacancy in the service or asks sanction for the creation of a new post. But the final power of appointment is vested in the Secretary of State. The effect of these changes is shown in the statement on the next page.

Indian Educational Service.

Province.	1916-1917.								1921-1922.							
	Europeans.		Indians.		Vacant.		Total.		Europeans.		Indians.		Vacant.		Total.	
	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.	Men.	Women.
Madras . .	26	2	1	..	1	2	28	4	23	8	20	1	10	4	53	13
Bombay . .	33	5	1	..	3	..	37	5	27	3	26	1	7	1	57	5
Bengal . .	39	3	4	..	6	..	49	3	30	3	27	..	10	1	67	4
United Provinces .	32	2	..	..	2	..	34	2	32	3	11	..	6	1	49	4
Punjab . .	17	..	..	..	3	..	20	..	18	3	12	..	4	..	34	3
Burma . .	19	..	1	..	2	..	22	..	25	2	2	..	9	1	36	3
Bihar and Orissa .	18	4	2	..	3	..	23	4	21	4	14	..	4	1	39	5
Central Provinces .	17	2	..	..	..	..	17	2	16	3	7	..	3	..	26	3
Assam . .	7	1	..	..	..	..	7	1	7	1	2	..	..	..	9	1
North-West Frontier Province.	2	..	..	..	..	..	2	..	1	1	2	..	..	..	3	1
Total .	210	19	9	..	20	2	239	21	200	31	120	2	53	9	378	42

51. The large percentage of vacancies in the service calls for some explanation. It is due in part to difficulties of recruitment but even more to the reluctance of local Governments to fill vacancies in the service. It is unnecessary to explain the reasons which have made it difficult to obtain recruits in England to the Indian Educational Service; the same causes have affected recruitment to the other Imperial services. The reluctance of local Governments to fill vacancies in the service arises from motives of economy to understand which the financial effect of the reorganisation must be explained.

Revised scales of pay. Indian and Provincial Educational Services.

52. When the Indian Educational Service was reorganised in 1919, the opportunity was taken to revise the scale of pay of the service in the light of the changed economic conditions after the war and in view of the difficulty which had been experienced before the war in obtaining recruits in England. The new scale of pay is from Rs. 400 to Rs. 1,250 per mensem with an overseas allowance rising from Rs. 150 to Rs. 250 per mensem for European recruits, and with two selection grades for a limited number of officers—one from Rs. 1,250 to Rs. 1,500, and the other from Rs. 1,500 to Rs. 1,750, small special allowances being attached to particular posts. Recruits over 25 years of age, selected for their special qualifications and experience, are brought in on the rate of pay which they would have reached had they joined the service at the age of 25. At the same time the Provincial Educational Services, which are now named after the provinces, the Bengal Educational Service, the Bombay Educational Service and so forth, were placed on time-scales of pay ranging between Rs. 250 and Rs. 800.

53. In order to carry out the new policy of "Indianisation" a considerable number of the vacancies in the Indian Educational Service must now be filled by Indians. Faced in all cases with financial stringency, in several cases with budget deficits, local Governments have not unnaturally been unwilling to offer to Indian recruits the higher rates of pay attached to the Indian Educational Service when they have found that the most competent men available on the spot are prepared to accept the pay of the provincial service. This fact has been brought out in the reports of more than one local "retrenchment committee." It must be remembered that even a graduate of an Indian university after professional training at a normal college is considered to be well paid if he enters a Government high school on a salary of Rs. 100 per mensem. In the present state of education in India European qualifications, which term is held to include education at an English, American or continental university, add

enormously to the market value of the Indian recruit; but the difference between the pay of the graduate teacher on Rs. 100 to Rs. 300 per mensem and the member of the Indian Educational Service, whether professor or inspector, on Rs. 400 to Rs. 1,250 per mensem appears even so to be disproportionate. The whole question of the superior services in India is to be considered by a Royal Commission this autumn.

The Subordinate Educational Services.

54. The pay of the subordinate services was also revised in all provinces in order to meet the increased cost of living. In Bengal the graded system gave place to a time-scale in the teaching and inspecting branches with effect from the 1st September 1921 and the rates of pay sanctioned vary from Rs. 35 to Rs. 450. It has also been decided to introduce a time-scale of pay for the ministerial and miscellaneous branches. In the United Provinces the pay of deputy and sub-deputy inspectors came twice under revision (in 1918 and 1921) and ranges from Rs. 150 to Rs. 250 and Rs. 100 to Rs. 140 respectively. A bonus of a month's pay was also granted on the occasion of the second revision. The revised rates of pay for the teaching staff are shown in paragraph 141. The reorganisation scheme in Bihar and Orissa sanctioned from 1st April 1920, divided the service into six branches and two divisions, the pay of the upper division being Rs. 150—15/2—240, and the lower Rs. 60—6/2—120 for men and Rs. 100—5/2—140 for women. Members who were in either division of the service before it was reorganised have been given the option of remaining in the grades so long as they continue in that division; and at the same time the pay of the grades has been raised. This breaking up of the service has made for convenience and prevents the creation of posts in one branch of the service from affecting the prospects of members in another branch. A like consideration led to the separation of the Subordinate Educational Service in the Punjab into two branches, the one, which contains the English masterships in Government secondary schools and the junior inspecting posts, has grades of appointment ranging in value from Rs. 55 to Rs. 250: the other, containing the classical and vernacular teacherships in secondary schools, ranges from Rs. 55 to Rs. 190. The reorganisation of the Subordinate Educational Service in Assam on a time-scale basis with a minimum of Rs. 60 and a maximum of Rs. 350 has not given satisfaction; and the question of further improving the pay of the service has been the subject of a number of resolutions in the local legislative council. Want of funds is one of the main difficulties in granting higher terms. The pay of the lower subordinate educational service was also revised. Owing to great economic distress in the North-West

Frontier Province the scale of pay of the subordinate educational service was revised no less than three times during the quinquennium under review. The minimum rate is now Rs. 50 and the maximum is Rs. 240.

Educational Institutions.

Institutions managed by Government. (a) Professional colleges.

55. There is only a limited number of educational institutions under the direct management of Government. It includes the majority of the professional colleges, which teach medicine, agriculture, engineering, etc. These colleges are administered by the technical departments concerned, *e.g.*, the Medical and Agricultural Departments, and the senior posts in the colleges are filled by members of the technical services. In view of the high cost of constructing, equipping and staffing such institutions, if the qualifications of the ex-students are to receive general recognition (if, for example, the degrees of the medical colleges are to be recognised by the British Medical Council), there is every likelihood that professional education will, for many years to come, remain almost entirely in Government hands.

(b) Arts Colleges and Secondary Schools.

56. There are a few Arts colleges and a fairly large number of secondary schools directly under Government. These colleges and schools are maintained either as model institutions, to set a standard for private institutions in the neighbourhood, or to meet the needs of backward localities where private initiative cannot be relied upon. There are centres in rural districts, for example the sub-divisional headquarters in Assam, where there is a fairly large demand for secondary education but not a sufficient number of well-to-do residents to found a private school for the benefit of the countryside. It is particularly in such centres, that the help of Government is needed. If it is not forthcoming, then the responsibility for meeting the demand for secondary education is forced upon local bodies, whose resources are not adequate to meet the claims of vernacular education, which is their proper charge. Primary education is provided by local bodies, either directly by means of Board schools or indirectly by grants to aided primary schools. The Government primary schools included in the following table are, with few exceptions, special schools attached to training institutions or schools in backward areas where local authorities have not yet been constituted, such as the hill tracts of Assam :—

(c) Primary Schools.

Institutions classified according to management, 1921-22. Management of Institutions.

Type of Institution.	Publicly-managed Institutions.		Privately-managed Institutions.		Total Institutions.
	Government.	Board.	Aided.	Unaided.	
Arts Colleges	44	3	97	23	167
Professional Colleges	47	..	8	9	64
Secondary Schools	542	2,392	4,711	1,342	8,987
Primary Schools	1,789	50,314	93,587	14,380	160,070
Training Schools	433	483	151	5	1,072
Special Schools	167	60	2,114	598	2,939
Total	3,022	53,252	100,668	16,357	173,299
			Unrecognised Schools		34,807
			GRAND TOTAL		208,106

Direct Government Management exceptional.

57. The direct administration of educational institutions by Government is strictly limited, and this limitation is in accordance with the accepted policy of the Government of India which is thus justified in the resolution of 1913:—"It is dictated not by any belief in the inherent superiority of private over State management but by preference for an established system and, above all, by the necessity of concentrating the direct energies of the State and bulk of its available resources upon the improvement and expansion of elementary education. The policy may be summarised as the encouragement of privately managed schools under suitable bodies maintained in efficiency by government inspection, recognition and control and by the aid of government funds."[5]

Control by Government over institutions under private management.

58. Control over the standard of education provided in colleges and secondary schools under private management is exercised by local Governments and universities, usually acting conjointly and sometimes through the agency of a joint board. This control is effected by means of "recognition", reinforced by grant-in-aid.

[5] Indian Educational Policy, 1913, p. 17.

(a) By Recognition.

59. The recognition of an institution by Government or a university entitles it to present candidates for the examinations conducted by the recognising authority and ex-hypothesi to compete for scholarships awarded on the results of these examinations. Recognition in short brings a school or college into the public system of education in India; and except for a brief reference in paragraphs 460*f* this volume deals only with recognised or "public" institutions. Statistics for unrecognised or "private" institutions are included in some of the tables but since these institutions are not open to public inspection and usually do not maintain daily registers the statistics are unreliable.

Recognition by Universities.

60. The power of recognising or affiliating colleges is vested in the universities though the formal approval of Government is required in every case. The recognition of high schools, which implies the permission to present pupils for matriculation, has in some provinces given rise to controversy between the university and the education department. In Bengal, for example, the views of the department and the university in this matter have been widely divergent. While the Education Department has been concerned with maintaining a certain standard of efficiency in the matter of buildings, staff and teaching in secondary schools, the university has from various motives aimed rather at increasing the number of boys presented for matriculation (*vide* paragraph 153). The Calcutta University Commission, while in sympathy with the efforts of the Bengal Education Department to preserve the quality of secondary education, was influenced by the prevalent feeling in Bengal to suggest, as a compromise between the conflicting claims of the department and the university, the creation of an independent board of secondary education, which should be entrusted not only with the power of recognition but also with the management of government high schools and the distribution of grants-in-aid. In conformity with its recommendations such boards, without, however, the administrative powers suggested by the Commission, have been constituted at Dacca in Bengal and in the United Provinces. On these boards, the department, the university, the schools and the public are represented. In view of the close inter-dependence of the various stages of education it is doubtful whether the multiplication of independent controlling bodies is likely to conduce to greater educational efficiency. In most provinces the universities have been content to rely on the advice of the education department when according or withholding recognition. Where a school final examination has been instituted and is conducted by the Education

Boards of Secondary Education.

Department the power of recognition naturally vests in the Department.

61. Inspection is the essential preliminary to recognition. Colleges seeking new affiliation or extended affiliation in any particular subject are usually visited by a board of inspection appointed by the university. The only inspecting agency available to visit high schools is that of the Education Department. Thus the influence exercised by Government over secondary schools by means of inspection is, except where the university rejects the advice of the department, very great.

(b) By grants-in-aid.

62. But the standard of efficiency required for recognition is a minimum standard and it is rare that recognition once accorded is withdrawn. A more potent influence for the betterment of secondary education is the system of grant-in-aid. Of the recognised secondary schools in India under private management 4,711 are in receipt of aid from public funds. The amount of grant given to each class of school varies in accordance with the financial circumstances of the province and the system adopted for assessment. This subject will be dealt with more fully in the chapter on secondary education and is treated at length in Occasional Report No. 12 issued by the Bureau of Education. The essential facts are that the majority of aided schools are dependent entirely upon grants-in-aid and fees for their maintenance, and that consequently a judicious use of grants enables Government to insist upon the employment of qualified teachers in aided schools, on the payment of adequate salaries, on the provision of proper accommodation and even on the maintenance of a certain standard of efficiency in the teaching.

Inspectors.

63. Local Governments therefore control education directly in the case of a small number of Government institutions and indirectly by means of recognition and grant-in-aid in the case of other institutions. The chief agent employed by Government is the inspector. The importance of the duties of supervision and control carried out by the inspector has led to a popular misconception of this officer as one employed solely to enforce departmental regulations. "This is very far from the truth. In actual fact he often is, and he always should be, the counsellor and friend of school managers, local bodies and teachers. Instances could be quoted of districts and divisions where during the past quinquennium schools have been improved beyond recognition in methods, organisation and equipment through the individual stimulus of inspecting officers."[6]

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[6] United Provinces, p. 18.

Inspecting staff (men), 1921-22.

Province.	Inspectors.	Assistant Inspectors.	Deputy or District Inspectors.	Sub-Inspectors.	Special Inspectors and Supervisors.	TOTAL.
Madras	16	17	..	(a) 195	225	453
Bombay	8	..	37	144	..	189
Bengal	15	5	(b) 89	(c) 295	..	404
United Provinces	15	10	58	(d) 195	4	282
Punjab	7	11	30	(g) 64	..	112
Burma	9	6	85	66	..	166
Bihar and Orissa	6	..	32	275	(e) 23	336
Central Provinces and Berar.	7	7	68	..	..	82
Assam	2	3	21	41	..	67
North-West Frontier Province	2	..	5	6	..	13
Coorg	(f) 1	..	..	1	..	2
Delhi	(h) 1	..	1	(g) 1	..	2 +1
Ajmer-Merwara		..	1	1	..	2
Baluchistan	1	..	..	..	..	1
Bangalore	(f)	..	..	1	..	1
India	90	59	427	1,285	252	2,113

(a) Sub-Assistant Inspectors.
(b) Including 61 Sub-Divisional Inspectors.
(c) Including 27 Assistant Sub-Inspectors and Inspecting Maulvis.
(d) Sub-Deputy Inspectors.
(e) Including 17 Inspecting Maulvis.
(f) There is one Inspector for both Coorg and Bangalore.
(g) Assistant District Inspectors.
(h) There is one Superintendent of Education for *Delhi* and *Ajmer-Merwara*.

Inspectresses.

64. Special mention must be made of the officers employed on the inspection of girls' schools. The following statement shows their number:—

Inspecting staff (women), 1921-22.

Province.	Inspectresses.	Assistant Inspectresses.	TOTAL.
Madras	5	21	26
Bombay	4	..	4
Bengal	2	12	14
United Provinces	12	..	12
Punjab	6	3	9
Burma	..	1	1
Bihar and Orissa	2	(a) 6	8
Central Provinces and Berar	2	4	6
Assam	1	1	2
North-West Frontier Province	1	..	1
Delhi	1	..	1
India	36	48	84

(a) Including one Lady Superintendent of *Atus* (Muhammadan lady tea chers).

Of these 18 are in the Indian Educational Service and 42 in the Provincial Educational Service. The pay of the women's branch of the Indian Educational Service was revised in 1919. It is impossible in this case to insist on the recruitment of Indians to the senior service since Indian ladies are very rarely forthcoming for such employment. The work of an inspectress is beset with peculiar difficulties. The area under her charge is usually much larger than that entrusted to an inspector: the inconveniences of travel are enormously enhanced in the case of a lady travelling by herself. Yet the teachers in girls' schools need constant help and encouragement. "Theoretically it would be a great advantage to have more district inspectresses but in practice it is almost impossible to secure women of the right type, to provide suitable conveyance, accommodation and protection."[7] For this reason with few exceptions the ladies employed on such work by the department are Europeans, Anglo-Indian and Indian Christians; even so their number is quite inadequate if they are to fulfil one of their most important duties and act as missionaries in the cause of female education. In practice many girls' schools have to be visited by district inspectors—an arrangement which does not conduce to their popularity.

Local Bodies.

65. Subject to the general powers of supervision and recognition exercised by the local Government, the administration of many of the educational institutions in every province is in the hands of local bodies, *i.e.*, municipalities and district (or rural) boards. The legislation governing the educational functions of local bodies was described in the last quinquennial review. To this legislation has been added during the last five years the primary education Acts of which a description is given in paragraphs 190*f*. The main object of all these acts was to empower local bodies to introduce compulsory education. They have not, with the exception of the Madras Act, made any alteration in the system by which education is administered by local bodies.

New Bodies. (*a*) In Burma.

66. In Burma eight divisional educational boards were created in 1917. They will disappear in 1923. "On the whole the boards have served their purpose well but the experiment might have been more successful had a greater measure of power been entrusted to the boards from the first, and had there existed a better understanding on both sides of the distribution of responsibilities between the local education authorities on the one hand and the officers of the Government Education Department on the other."[8] By the Burma Rural Self-Government Act of 1921 district or joint school boards

[7] United Provinces, p. 17.
[8] Burma, p. 89.

are to be appointed by elected district councils. These boards will be entrusted with the expenditure of "district school funds" which will consist of all sums contributed by local authorities, Government or private persons for education and of school fees. The Madras Elementary Education Act passed in 1920 constituted in each district a district educational council which is to be an independent *ad hoc* body and not a statutory committee of any of the existing local bodies. Each council contains a few *ex-officio* and nominated members, but the majority of its members are elected by the local authorities within the district. Its principal functions are:—

(*b*) In Madras.

(*a*) to prepare schemes for the extension of elementary education;

(*b*) to elicit and direct the co-operation of all agencies, whether public or private, in the opening of new schools;

(*c*) to regulate the recognition of elementary schools and to disburse grants-in-aid.

Subject to the rules framed for their guidance, local bodies and private agencies continue to exercise full control over all elementary schools under their management. Provision is made for the levy, with the previous sanction of the Governor in Council, of an education tax, the proceeds of which will be entirely at the disposal of each local authority for use within the areas in which it is raised: a section of the Act provides for at least an equivalent contribution being made from provincial funds to each local body which levies an education tax, in addition to the usual contributions now being made on behalf of elementary education. Finally provision is made for the introduction of compulsion in suitable areas with the previous sanction of the local Government.

Local Bodies and Secondary Education.

67. The first duty of local bodies is towards vernacular education and they are not supposed to undertake any financial responsibility for "English" education until the claims of primary education have been fully met. In practice a certain number of local bodies do maintain or aid secondary English schools. This extension of their functions has arisen more from accident than design. There is a natural tendency for a vernacular middle school, owing to pressure from the more well-to-do parents, to add English to its curriculum and to develop into a middle English school, and so in the course of time into a high school. It is not easy for Government to step in at any stage of this development and prohibit the local authority from raising the status of its school. The Punjab Government did in 1921 attempt to check this tendency by taking over the management of eleven high schools from local

bodies on the understanding that the local funds so saved should be devoted to primary education. In spite of the very decided recommendations of the Decentralisation Commission, which were endorsed by the Government of India in a circular letter of 1916, this question of the duties of local bodies in respect of secondary education is in some provinces not satisfactorily settled. It would be of greater importance were it not that the limitations of local finance do not permit local bodies to go so far in the direction of providing secondary schools as some of them would wish.

Local Bodies and Primary Education.

68. But, as I have said, the chief concern of local bodies is elementary education. This they provide either directly through the medium of schools under their own management or indirectly by grants-in-aid to schools under private management. The policies adopted by different provinces differ widely according as they rely on public or private management. This divergency dates back to the beginnings of vernacular education in this country, when Madras, for example, adopted the system of grant-in-aid for financing primary education while the Punjab and the North-West Provinces (now the United Provinces) developed a system of Government or local board schools. The Government of India in its resolution on Indian educational policy issued in 1913 recommended that the extension of primary education should be carried out through the medium of board schools. The board school is, as a rule, unquestionably more efficient than the aided school. It possesses stability and can draw on the funds of the board for its material requirements; the teacher is subject to direct control and can be transferred if he is unpopular or inefficient. On the other hand aided schools, the lower standard of efficiency being conceded, make smaller demands on public funds and may serve a useful purpose as pioneers in backward areas. Many of them are in the first instance religious institutions.

Programmes of expansion.

69. Although the administration of elementary education is in the hands of local bodies, the initiative for any concerted attack upon illiteracy must, largely for financial reasons, come from Government. The past quinquennium has been remarkable for the initiation by several local Governments of detailed programmes of educational expansion in rural areas. Of these an account will be given in the chapter on primary education. It is becoming increasingly evident that any effective advance can be achieved only if local Governments and local bodies co-operate to carry out definite schemes framed after due consideration of the educational needs of the province as a whole and the particular needs and resources of each district. "It is not favourable to economy that any local education authority

should conduct its business 'from hand to mouth' and embark on particular improvements without considering what they will lead to, what other improvements are required, and what should be the order of priority. The preparation of schemes embodying a policy for gradual execution will enable local authorities and their constituents to see what is in front of them and Government's consideration of specific proposals for giving effect to the authority's policy, when financial circumstances permit (observing a due order of priority as between different parts or items of the scheme), will be greatly facilitated." The foregoing passage which is quoted from the last report of the English Board of Education (with only the substitution of "Government" for the "Board of Education") is as applicable to India as to England.

Financial Relations of Government to local Bodies.

70. The adoption of these provincial programmes of expansion has brought about certain changes in the financial relations of Government to local bodies. Hitherto in theory grants from provincial revenues were made proportionate to the provision made by local bodies from their own resources. But when local Governments prepared schemes involving large and continuous expenditure spread over several years, they were at once brought face to face with the fact that, if advance were to be restricted by the pace at which boards could find additional funds for education, the rate of progress would be indefinitely retarded. They adopted different plans to overcome this difficulty. In the United Provinces all attempt at balancing provincial and local expenditure was temporarily abandoned and the local Government undertook to meet in three years the full cost of its scheme for the spread and improvement of vernacular education. On the same principle the grants given in some provinces, *e.g.*, Assam, for the improvement of the pay of primary teachers were not made contingent on any *pro rata* increase in the expenditure from local funds. In the Punjab, the financial position of each board, its immediate and potential resources were taken into consideration and the cost of executing so much of the programme of expansion as could be carried out in five years was then divided between local and provincial revenues in such a way that no board should be liable to spend in any one year on education more than 25 per cent. of its net revenues. The responsibility assumed by Government under this scheme of distribution varied from 50 per cent. to 100 per cent. of the amount of the new expenditure required. A contract was then entered into between Government and each board under which both parties accepted liability for their own share of the estimated expenditure. In Bihar and Orissa this thorny question of the relative responsibilities of Government and local boards.

for the finance of vernacular education has been referred for decision to a special committee. The question was considered by the Central Advisory Board of Education which made the following recommendations:—

"(1) That Government should by legislation, if necessary, take measures to ensure a minimum expenditure on elementary education in each local area; that this minimum and the portion thereof to be met respectively from provincial and local funds should be determined by Government after careful consideration of the financial and educational needs and circumstances of each area and the claims of local services other than education.

N.B.—It was recognised that in some areas, particularly in Madras, a substantial portion of this minimum expenditure not met by Government would actually be met from private funds, but local bodies should be held responsible by Government for seeing that the portion not met by Government was actually forthcoming from whatever source.

(2) That additional expenditure on elementary education above this minimum by local bodies should be encouraged by proportionate grants from Government and for the purpose of calculating this proportion the districts should be graded according to their needs and means.

(3) That local bodies should be encouraged to develop the higher stages of elementary education and to retain pupils throughout the full course by higher rates of grants in respect of expenditure on these higher stages."

The Deputy or District Inspector as executive officer to local bodies.

71. For administrative purposes, such as the appointment and transfer of board school teachers and the assessment of grants to aided schools, the district board makes free use of the services of the deputy or district inspector. This official of the Education Department has thus a dual and often a very difficult position to fill. He is responsible to the district board for the management and control of the schools under its charge and to the Education Department for the inspection of these schools, for their educational efficiency and for furthering to the best of his ability the general educational policy of Government. The importance of his position has been recognised in some provinces, *e.g.*, Bengal and the Punjab, by the promotion of this class of officer to the Provincial Educational Service.

Under the district inspector are the assistant district or sub-inspectors. Doubt is expressed by some Directors whether the present type of graduate assistant district inspector, to whom the immediate supervision of the work of primary

schools is entrusted, is quite the best type of man for the purpose. His long absence from the village primary school, supposing that he ever attended one, and the very different educational atmosphere with which he has been surrounded in high school and college make him too often an unsympathetic and unhelpful adviser to the humble and ill-educated village teacher. On the other hand the old type of sub-inspector lacked up-to-date knowledge of methods of instruction. Both economy and the interests of educational efficiency suggest the employment of a different class of "helping teacher" with qualifications something between the old inspecting pandit who knew too little and the ambitious young graduate who knows too much.

Aided Schools.

72. In spite of the increase in the number of Government secondary schools and board primary schools the bulk of the school-going population in India is still in attendance at institutions under private management. In the case of higher and secondary education this reliance on private initiative is, as has been explained, the accepted policy. In the case of primary education it is more often the result of financial necessity. The aided primary school, the accommodation for which must be found by the teacher, and the running charges of which are largely met from fees, is naturally a much cheaper article than the board school. So far as its resources permit, Government, either directly or through contributions to local bodies, attempts to maintain a certain standard of efficiency in schools of each class. It is faced perpetually by the problem of deciding between the conflicting claims of quality and quantity: that is to say, it has to balance the advantages of raising grants to aided schools in order to improve their efficiency or of spending such additional funds as may be available on bringing new schools on the aided list. For it may safely be said that few unaided schools are so by choice. If public finance permitted there are not many schools under private management which would not gladly accept assistance from public funds.

73. It is gratifying to find that during the quinquennium private contributions towards education have increased in value from Rs. 1·95 lakhs to Rs. 3·08 lakhs. There is, however, as pointed out in paragraph 137, a certain amount of waste in the present distribution of private effort; which results in an unnecessary multiplication of schools in certain centres to the neglect of those more educationally backward. Again few aided schools possess any permanent endowment. There is here a large scope for private generosity. Typical instances of such wise generosity are the benefactions of Sir Ganga Ram in Lahore and of the Rani Sahiba of Binga who made an

endowment of two lakhs of rupees for the improvement of the salaries of teachers in the Hewett Kshatriya High School, Benares.

Committees.

74. Every college, whether managed by Government or by private agencies, must under the Act of 1904 have a governing body in order to qualify for affiliation. In practice the governing bodies of Government colleges rarely function and the control is left largely in the hands of the Principal. Committees whose functions are chiefly advisory are attached to Government schools in some provinces, for example Bengal, the United Provinces and the Central Provinces. These committees were being reconstituted and their functions revised in the latter two provinces at the close of the quinquennium.[9] Proprietary schools, which owe their existence to the generosity or, in the case of those which are run at a profit, to the self-interest of private individuals, are not found in any large number outside Bengal. Elsewhere aided secondary schools are usually founded by societies or associations, often denominational, and are managed by committees representing the original founders. In the United Provinces the managing bodies of aided secondary schools are required to register themselves under the Societies Registration Act. This is a salutary provision ensuring the permanence of the school and some continuity in the management. Attempts to extend the use of educational committees have not proved very successful. In the Central Provinces for example 26 committees of local ladies were constituted to encourage female education. Though some very good work has been done by individual members the new committees have generally proved a failure. Very few educated women are available to serve on them and these have as a rule had no experience of committee work. "Rivalry between the members of the committee and the difficulty of preserving amicable relations between them and the staffs of the schools have also contributed to their failure."[9] In the United Provinces village school committees have been in existence for some years. Accounts of their value vary from district to district. The majority prove apathetic, some of them prove "harmful by unnecessary interference;"[10] but in the Agra district, where every effort is being made to train and encourage them, some of the committees are doing excellent work.

[9] Central Provinces, p. 63.
[10] United Provinces, p. 20.

Statistics of Universities.

University.	Type.*	Date of Foundation.	Faculties.†	No. of Teaching Staff.	No. of Students.		No. of Graduate in Arts and Science.	
					1917	1922	1917	1922
Calcutta	Aff.	1857	A, Sc., L, M, Eng. . . .	1,227	28,618	23,044	2,636	2,768
Bombay	Aff.	1857	A, Sc., L, M.	460	8,001	8,493	673	775
Madras	Aff.	1857	A, Sc., L, M, Eng. . . .	961	10,216	12,653	776	1,176
Punjab	Aff.	1882	A, Sc., L, M, Ag., Com., O .	504	6,583	7,372	676	834
Allahabad	Aff. & Teach.	1887 & 1921	A, Sc., L, M, Com. . . .	512	7,807	6,445	671	500
Mysore‡	Aff.	1916	A, Sc.	92	..	1,050	..	142
Benares Hindu	Teach.	(a) 1916	A, Sc., L, Th., O. (c) . . .	103	..	1,460	..	152
Patna	Aff.	1917	A, Sc., L, Ed.	198	..	2,417	..	261
Osmania‡	Teach.	1918	A, L, Th.	30	..	345	..	..
Aligarh Muslim	Teach.	1920	A, Sc., L, Th. (d) . . .	53	..	702	..	76
Rangoon	Teach.	1920	A, Sc., L, O. (e) . . .	64	..	507	..	54
Lucknow	Teach.	1920	A, Sc., L, M, Com. . . .	55	..	632	..	149
Dacca	Teach.	(b) 1921	A, Sc., L.	86	..	(f) 1,030	..	211
Delhi	Teach.	1922	A, Sc.	48	..	706	..	..
			TOTAL .	4,293	61,225	66,865	5,432	7,098

* *Aff.* = Affiliating ; *Teach.* = Teaching.

† *Abbreviations* :—A = *Arts* ; Sc. = *Science* ; L = *Law* ; M = *Medicine* ; Ed. = *Education* ; Eng. = *Engineering* ; Ag. = *Agriculture* ; Com. = *Commerce* ; Th. = *Theology* ; O. = *Oriental learning*.

‡ Incorporated by legislation in an Indian State

N.B.—The teaching of the *affiliating* universities is carried on by the staffs of their constituent colleges, but generally the universities themselves provide instruction in certain branches of higher education as required by the Act of 1904.

(*a*) The Act was passed in 1915. (*b*) The Act was passed in 1920. (*c*) Pure and Applied Science (*Engineering*). (*d*) There are no Faculties but *Departments of Studies* in different subjects. (*e*) There are no Faculties, but *Boards of Studies* in various subjects. (*f*) Including 154 students of the Dacca Medical School who took their science courses at the University.

It will be seen that the number of universities in India has increased during the last quinquennium from seven to fourteen. Of these twelve are in British India.

75. The first university in India, that of Calcutta, was founded in 1857. Between 1857 and 1887 four new universities at Bombay, Madras, Lahore and Allahabad were added. The Universities were reconstituted by the Indian Universities Act of 1904. These five universities were all of the affiliating type. They consisted of groups of colleges, situated sometimes several hundred miles apart, bound to each other by a legally constituted central organisation, which determined the qualifications for admission to the university, prescribed the courses of study, conducted the examinations preliminary to the award of degrees and, through the agency of the affiliating system and by occasional visits of inspection, exercised a mild form of supervision over the work of the affiliated colleges. There was nothing under this system to limit the number of institutions affiliated to a university; and for thirty years, *i.e.*, from 1887 to 1916, the growing demand for university education was met, not by the creation of new universities, but by enlarging the size of the constituent colleges and increasing their number. By 1917 this system of inflation had been carried so far that the composition of the original five universities stood as follows:— **The institution of affiliating universities.**

University.	Colleges.	Students.
Calcutta	58	28,618
Bombay	17	8,001
Madras	53	10,216
Punjab	24	6,558
Allahabad	33	7,807

It had become obvious that further expansion on the same lines was no longer possible without a serious loss of efficiency, indeed that efficiency was already suffering from the excessive demands made on organisations not adapted for indefinite expansion. The universities had ceased to be living organisms since many of their constituent members contributed nothing to the common life of the university of which they were a part and, so far from being essential to its existence, actually impaired its vitality. They were in some cases little more than agglomerations of teaching units, bound to the

central institution only by their need for some external examination for their students which should command public confidence.

Need for unitary teaching universities.

76. The Government of India in their resolution of 1913 recognised these facts. "It is necessary," they said, "to restrict the area over which the affiliating universities have control by securing in the first instance a separate university for each of the leading provinces in India and secondly, to create new local teaching and residential universities within each of the provinces in harmony with the best modern opinion as to the right road to educational efficiency." The development of the policy advocated by the Government of India on the ground of educational efficiency might have been long delayed had this motive not been reinforced by the strength of communal feeling and the growth of local and provincial patriotism. To the local patriotism of the peoples of Bihar, Oudh and Burma may primarily be ascribed the foundation of the Universities of Patna, Lucknow and Rangoon. The Universities of Benares and Aligarh represent educational movements on the part of the Hindu and Muhammadan communities respectively. The University of Dacca is the product of both forces, being designed to meet the wishes of the people of Eastern Bengal for a local university centre and to encourage the higher education of Muhammadans, who form the majority of the population of Eastern Bengal.

The Calcutta University Commission.

77. The disintegration of the older universities had already commenced under the attacks of these local and communal forces, when the educational argument advanced by the Government of India in favour of unitary teaching universities received most powerful support from the report of the Calcutta University Commission. The report of the Commission did more than strengthen the case of the advocates of university reform; it offered constructive proposals as to the lines to be followed in university reform.

The Calcutta University, the oldest university in India, situated in the centre of a population which had taken very kindly to higher education, had suffered more than any other from the evils of inflation. Before attempting to deal with these evils the Government of India wisely decided to call in expert advice. A commission was appointed under the chairmanship of that distinguished educationist, Dr. (now Sir) Michael Sadler, Vice-Chancellor of Leeds University, having as members, Dr. J. W. Gregory, F.R.S., D.Sc., M.I.M.M., Professor of Geology at the University of Glasgow; Mr. P. J. Hartog, C.I.E., M.A., B.Sc., L-es-Sc., Academic Registrar, University of London; Professor Ramsay Muir, M.A., Professor of Modern History at the University of Manchester;

the Hon'ble Sir Asutosh Mookerjee, Kt., C.S.I., D.L., Puisne Judge, High Court of Judicature at Fort William in Bengal; the Hon'ble Mr. W. W. Hornell, C.I.E., M.R.A.S., Director of Public Instruction, Bengal; and Dr. Zia-ud-Din Ahmad, C.I.E., D.Sc., Ph.D., Senior Tutor and Professor of Mathematics, Muhammadan Anglo-Oriental College, Aligarh.

The recommendations

78. The Commission met in November 1917 in Calcutta and after hearing 93 witnesses and receiving written evidence from 412 people and further visiting a large number of institutions in Bengal and other parts of India presented its report in March 1919. The Commission in this monumental work, after reviewing the conditions of student life in Bengal and describing in detail the organisation and functions of the Calcutta University, recommended a complete reorganisation of the system of higher education in Bengal. They recommended in the first place the immediate establishment of a new unitary teaching university at Dacca and the gradual development of other centres of collegiate education with a view to the establishment of similar universities. They recommended a synthesis of the work of the various colleges situated in Calcutta, the co-ordination of the work of the outside colleges by means of a *mofussal* board, and a complete revision of the constitution of the Calcutta University with the special purpose of differentiating between the academic and purely administrative sides of its work. Finally, in order to raise the standard of university education in Bengal, they recommended the delegation of all work up to the intermediate standard, hitherto conducted by the University, to institutions of a new type, called intermediate colleges, which should provide both general and special education under the supervision of a board of secondary and intermediate education. To this body, which should contain representatives of Government, the University, the intermediate colleges and the high schools, they suggested that the administration and control of secondary education should be transferred from the university and the Education Department.

Considered by other universities.

79. When the report was published it was at once recognised by the general public that, though the Commission were primarily concerned with the Calcutta University, many of their recommendations were equally applicable to the other Indian universities which had been reconstituted on identical lines by the University Act of 1904. The Government of India issued a resolution in January 1920, summarising the report of the Commission and commending its findings to the consideration of local Governments. Committees were accordingly set up at all university centres to consider how far the

recommendations of the Commission might be suitably adapted to meet local needs. It is noteworthy that all university Acts passed since the publication of the report, whether for the incorporation of new universities or for the reconstitution of older universities, have embodied many features of the scheme recommended by the Commission for Calcutta.

Action taken on the Commission's recommendations.

80. In order to give effect to these recommendations the Government of India drafted a bill for the reconstruction of the University of Calcutta. Questions of finance and questions of detail delayed the introduction of the bill in the Imperial legislature. The position was altered by the constitutional changes that took place in 1921. It was decided to transfer the control of the Calcutta University from the Government of India to the Government of Bengal and to leave any further initiative for the reform of the University to be taken by the local Government. An Act was passed in March 1921 substituting the Governor of Bengal for the Governor General as the Chancellor of the University. Except for this change and for the excision of the Dacca University area from the control of the Calcutta University, the report of the commissioners has had little effect on the condition of the University which they were called in to advise. The Government of India did indeed foresee this possibility, and in their resolution of January 1920 they expressed fears lest " vested interests may suspect that they are threatened and the sentiments which have grown round the University, as it exists, may feel themselves touched." They believed, however, that there was in Bengal a strong and genuine aspiration for improved methods in the higher branches of instruction and they appealed for the assistance and co-operation of the educated classes in carrying out university reform. Although a resolution was passed in the Bengal Council in July 1921 advocating an increase in the elective element of the Senate, no general movement in favour of a more extensive adoption of the Commission's proposals was evident in Bengal during the period under review.

New University Acts.

81. Schemes for the establishment of universities at Dacca, Patna, Benares and Aligarh had been under consideration during the previous quinquennium. The Patna University followed as a natural corollary on the formation in 1912 of the new province of Bihar and Orissa. The original scheme for a unitary residential university, which had been drawn up by an influential committee under the chairmanship of the late Sir Robert Nathan, had perforce been abandoned for financial reasons; and the university as it was finally incorporated by the Act passed in September 1917 does not differ greatly in form from the older universities except in the pos-

session of a wholetime paid Vice-Chancellor. (A fuller account of the constitution of this University will be found in the last Quinquennial Review). The Benares Hindu University Act was passed in October 1915; it was followed by the Patna University Act in September 1917, the Dacca University Act in March 1920, the Aligarh Muslim and Rangoon University Acts in September 1920, the Lucknow University Act in November 1920, the Allahabad University Act in December 1921 and the Delhi University Act in March 1922.

The University of Dacca.

82. It has been said that the Dacca University owes its birth to local and communal patriotism. The decision announced in December 1911 to revise the partition of the provinces of north-eastern India gave rise to grave apprehensions among the Mussulman community, who constituted the majority in the province of Eastern Bengal and Assam, that their educational progress would suffer by the coming change. In response to an expression of that apprehension made by a deputation in January 1912 the Viceroy—Lord Hardinge—promised to found a new university that would be open to all sections of the community and for the benefit of all. The Government of India later announced their intention that the Dacca University should be a model institution of a new kind —a unitary residential university. The first plans for the new university were drawn up by a Committee presided over by Mr. (afterwards Sir) Robert Nathan. The execution of these plans was delayed for various causes, including the war, until the Calcutta University Commission had published their report in 1919. The commissioners urged that the university should be established without delay and the Dacca University Act was passed in 1920.

83. The University has been fortunate in its material inheritance. In addition to the old building of the Dacca College it has been given the greater portion of the buildings on the estate destined for the Government of Eastern Bengal and Assam. The estate consists of between five to six hundred acres of park land; the buildings include the old secretariat, which now houses the library, the arts classes and a residential hall for Muslim students, and a palatial Government house, which is used for the meetings of the various university bodies. The University was further fortunate in securing the services of Mr. Philip Hartog, C.I.E., as its first Vice-Chancellor. Mr. Hartog had not only a distinguished record as Academic Registrar of the London University for seventeen years, he had also served on the Calcutta University Commission and was therefore intimately acquainted with the conditions of university education in Bengal and with the aims which the Commission had in view.

84. On the other hand, the new university was unfortunate in that its first years of existence coincided with a period of great financial stress in the province of Bengal. Whereas the Nathan Committee had estimated the recurring expenditure on the university at over thirteen lakhs annually, the University has had to be content hitherto with five lakhs for its maintenance; but the Government of Bengal have in eight years made further capital contributions out of the large sum accumulated from the Government of India grants between 1912 and 1920.

The new form of university constitution.

85. The University of Dacca was the first to adopt the revised form of constitution recommended by the Calcutta University Commission. Since this constitution with modifications has been adopted in all subsequent university legislation, a short description of it is necessary. In place of the Senate and Syndicate of the older universities, whose constitution and functions were described in the last Quinquennial Review, there are three main university bodies:—

(*i*) A large body, called the Court, on which are represented the chief interests of the community, either by election or by nomination. The functions of the Court are to make statutes and to pass recommendations on the financial accounts and the annual report, submitted by the Executive Council. They also have power to cancel ordinances made by the Executive Council, if a majority of two-thirds decides on such cancellation. Thus, every important change made in the University is brought to the notice of the Court and can be discussed by them, while in matters of university legislation they have important powers not only of discussion but of check.

(*ii*) The Executive Council, in whom the executive authority in regard to finance and university appointments and also all residual powers are vested.

(*iii*) The Academic Council, who are responsible for the control, general regulation and maintenance of standards of instruction, education and examination within the University, and for the initiation of all changes in academic matters and without whose consent no changes in such matters can be made. The Academic Council consists almost entirely of university teachers and is designed so as to secure the representation of the various departments of study undertaken by the University.

Special features of the Dacca Act.

86. Special provisions have been inserted in the Dacca Act in order to ensure the representation of the Muhammadan community on the Court and the two Councils. The Governor of Bengal is Chancellor of the University *ex-officio*. He has the

right of appointing forty members of the Court, besides life-members, and of appointing four members of the Executive Council. Without his sanction no changes in the statutes can be made and he has the right of vetoing changes in ordinances.

The Vice-Chancellor is a whole-time officer, and is the principal executive and academic officer of the University.

This constitution seems admirably adapted to secure the due representation of all the interests concerned in the proper conduct of the university; but it is as yet too early to pass any judgment on its working.

Progress made by the Dacca University.

87. Despite the unfavourable financial conditions under which it was started the University has made good progress. The laboratory accommodation for physics and chemistry has been greatly increased; and the laboratories have been re-equipped: the old library of the Dacca College has been modernised and is well supplied with periodical literature essential for up-to-date teaching; a department of Islamic studies has been created and the staff in the other departments has been so enlarged as to enable original work to be carried on; the department of economics has been supplemented by a department of commerce. I write elsewhere of the tutorial system.

The number of students (exclusive of students of "teaching" who receive their instruction in the Dacca Training College, and of students of the Dacca Medical School, who study chemistry and physics at the University) is over 1,000, of whom about 23 per cent. are Muhammadans.

Benares Hindu and Aligarh Muslim Universities.

88. The Benares Hindu University and the Aligarh Muslim University are communal institutions, the establishment of which had long been the subject of correspondence and conversations between the representatives of the Hindu and Muslim communities and the Government of India. The promoters had originally in view the establishment of affiliating universities to which should be attached the communal colleges and schools situated in various parts of India. In the interests of higher education the Government of India pressed for the substitution of unitary teaching universities. Their arguments were strongly reinforced by the report of the Calcutta University Commission. In the event two centres of Hindu and Muhammadan culture respectively have been founded, the one at the historic seat of Sanskrit learning, the other at a centre already made famous in the Muhammadan world by the institution founded by a distinguished patron of modern Muhammadan education, Sir Syed Ahmad.

89. Of the incorporation of the Benares Hindu University an account was given in the last Review. During the past five

years it has, under the enthusiastic direction of its Vice-Chancellor, Pandit Madan Mohan Malaviya, carried out an extensive building programme at a cost of seventy lakhs. Notable amongst its new buildings is the Engineering College, the equipment alone of which has cost ten lakhs. The University has received most generous support from Indian rulers and men of wealth.

90. The Aligarh Muslim University has the unique distinction of a lady Chancellor in the person of that enlightened ruler Her Highness the Begum of Bhopal; while His Highness the Aga Khan is associated with the University as Pro-Chancellor. The University has taken over and extended the buildings previously occupied by the Muhammadan Anglo-Oriental College. In its constitution and the functions assigned to the various university bodies it follows the Dacca model. The Academic Council, however, has the power to frame ordinances on academic matters for direct submission to the Court. The local Government is represented in the University by a Visiting Board consisting of the Governor, the members of the Executive Council, the Ministers, one member nominated by the Governor and one member nominated by the Minister in charge of Education.

91. Both the Benares and Aligarh universities retain direct relations with the Government of India from whom they receive grants and to whom their regulations are submitted for sanction. They have been classed as "central" subjects under the Government of India Act of 1919; and do, in fact, draw their students from all parts of India.

Rangoon University.

92. The Rangoon University, which came into being at the beginning of the quinquennium, is the realisation of a project mooted thirty years ago. It has two constituent colleges, University College and the Judson College. The staffs of both these institutions were strengthened before and after the establishment of the University by the addition of nine lectureships in the Indian Educational Service and eight in the Burma Educational Service to University College and of four lectureships to the Judson College. The University has been started with high aims. "A national university should be closely in touch with national life. It therefore undertakes the scientific research and teaching required by local industries; provides non-technical extra-mural teaching in the form of extension lectures and tutorial classes and reports by request, after systematic enquiry, on matters of social and economic importance. Its students and graduates also support settlements for the benefit of poor and depressed classes. There is no reason why the Rangoon University should not in time undertake all these varied activities. Accordingly,

in addition to the Arts and Science departments in University College, departments in Teaching, Law, Engineering, Forestry, Medicine and Fine Arts have been or, it is hoped, will shortly be established. The Senate has constituted boards of studies in all these subjects and courses leading to degrees or diplomas therein are, or soon will be in working."[1]

93. The University was opened at a time of great political ferment in Burma, which had not been included in the scheme of reforms introduced into India proper. The agitators took advantage of some local criticisms of the University Act to declare a boycott of the University. The criticisms were chiefly directed at the form assigned to the University, *i.e.*, a residential teaching university in place of the old type of affiliating university, and at the provision of an additional preparatory course in English for students matriculating but defective in this subject. Since there were no other arts colleges in Burma except the two incorporated in the University and since the preparatory English course was designed to ensure that the students should understand the University lectures and so increase their chances of obtaining degrees, the political character of the agitation was soon apparent and the attendance at the constituent colleges was rapidly recovering at the close of the year 1922.

Lucknow University.

94. The nucleus of the Lucknow University founded in November 1920 was formed from the Canning College, the King George's Medical College, and the Isabella Thoburn College for Women. Faculties in commerce and law have been added. The University is the product of the educational enthusiasm and energy of His Excellency Sir Harcourt Butler, Governor of the United Provinces, supported by the provincial patriotism of the people of Oudh. Over thirteen lakhs of rupees have been contributed by the *taluqdars* and *raises* to form an endowment for the new university. Both in its constitution and in the organisation of its work the Lucknow University follows closely the model of the Dacca University.

Allahabad University.

95. The recommendations of the Calcutta University Commission were also followed in the provisions of the Act of 1921, which reconstructed the Allahabad University. The constitution of the Allahabad University is very similar to that of Dacca and Lucknow with this important difference that in addition to the teaching and residential university at Allahabad there is an external side comprising a number of colleges situated in the United Provinces, the Central Provinces, Central India and Rajputana previously affiliated to and now associated with the Allahabad University.

[1] Burma, p. 22.

Separation of the intermediate classes

96. One important part of the Commission's recommendations has been accepted by the Government of the United Provinces and Government of India and incorporated in the Acts establishing the Lucknow, Dacca and Aligarh Universities and reconstituting that of Allahabad, namely, the separation of the intermediate classes from the sphere of university work and the transfer of control over them from the university to a Board of Secondary and Intermediate Education. Such a board was constituted for the Dacca University area by a notification of the Bengal Government in 1921. It contains twenty-two members of whom seven are elected by the University. The United Provinces Board was constituted by an Act passed in the same year. It consists of some forty members of whom approximately one quarter represent the universities in the Province. An Intermediate Examination Board was also formed for the Aligarh University by an Ordinance in 1922.

97. It is only natural that these changes should not have commended themselves to the outside colleges, except where, as at Agra, they may look forward to the establishment of a local university. These associated colleges realise that their existence as constituent parts of the Allahabad University is threatened and that they are almost inevitably destined to be converted into intermediate institutions. Many of these colleges would be unable to maintain themselves without the fees realised from their intermediate students, but if they are to retain their association with the Allahabad University they must, under the terms of the new Act, confine themselves after a period of five years from the date of its enactment to the instruction of post-intermediate students. This feature of the reorganisation of the Allahabad University has consequently hastened the establishment of a university at Nagpur, which came into existence during the present year, and has also set on foot movements for the establishment of universities at Agra and in Rajputana. Meanwhile in the United Provinces the Lucknow Christian College has already been converted into an intermediate institution and intermediate classes have been added to eleven high schools. Of the success of the latter experiment it is too early to speak, but that the addition of intermediate classes to high schools is not unattended with difficulties is clear from a description of a similar experiment at the New College, Patna, which will be given later in this chapter.

Delhi University.

98. The Delhi University Act was passed by the Indian Legislature in March 1922. The constitution of the University is similar to that of Lucknow. It is formed by the association of the St. Stephens' Mission College, the Hindu College and the Ramjas College with a view to the introduction of

common university teaching. Of this university, which was opened in May 1922, fuller mention will be made in the next Quinquennial Review. The University came into being at a time when the Imperial budget showed a serious deficit. It was therefore impossible to provide for a whole-time Vice-Chancellor, and the duties attached to this post were undertaken honorarily by Dr. H. S. Gour, M.L.A., who is assisted by a resident Rector. His Excellency the Viceroy himself became the Chancellor of the new university and the post of Pro-Chancellor was accepted by the Hon'ble Mian Sir Muhammad Shafi, K.C.S.I., C.I.E., Education Member of the Viceroy's Council, whose tenure of office has been marked by great developments in university education in India.

Madras University.

99. The report of the Commission also had its effect on centres so distant from Calcutta as Madras and Lahore. The Senate of the Madras University at a meeting held in October 1920 adopted the following resolution:—

"That the Senate is of opinion that the time has come when the increasing demands for liberal education in this presidency should be met by the establishment of more universities and by the redistribution of the territorial areas of the existing University so as to provide as far as practicable at least one university for each principal linguistic area within the presidency; and that the establishment of a university for the Andhras should be taken in hand without further delay."

So far, although the Madras University itself has been reconstructed during the present year, no new universities have been opened in either the Madras or the Bombay Presidencies.

Punjab University.

100. The question of university reconstruction evoked considerable discussion in the Punjab, but owing to a divergence of opinion as to the relative claims of the colleges and the university to control the advanced teaching no statutory change in the constitution was effected during the period under review. The question at issue in the Punjab is discussed at some length in the Director's report. "At present," he says, "the University exercises an excessive control over the courses and curricula but an inadequate control over the teaching given in its name."[2] Just at the close of the period an Academic Council was instituted which deals with all matters concerning university teaching, including inter-collegiate teaching, under the general authority of the Syndicate and Senate.

Osmania University.

101. The Osmania University is situated in the dominions of His Exalted Highness the Nizam and an account of it therefore does not fall within the scope of this report. It is unique

[2] Punjab, p. 55.

in India in that it employs the Urdu language as the medium of instruction. The University employs a Bureau of Translators to provide the necessary text-books for the university courses.

Mysore University.

102. The Mysore University which was mentioned in the last Review is for the same reason excluded from this report.

The Indian University for women.

103. Professor Karve's Indian University for Women at Poona has grown and achieved a much firmer foundation. It has received several endowments and loans for the purchase of a site and erection of buildings. A conditional promise of fifteen lakhs has caused its name to be extended to the Shrimati Nathibai Damodar Thackersey Indian Women's University. "Its objects remain the same, the provision, independently of Government aid or regulation, and through the medium of the vernacular, of a secondary and University education specially devised to suit Indian girls and women."[3]

A further reference to this University will be found in paragraph 255.

University teaching.

104. The teaching of the affiliating universities in India is, owing to their constitution, almost entirely carried on by the staffs of their constituent colleges. They had, however, even before the advent of unitary teaching universities, inaugurated several experiments in university teaching to supplement the work of the colleges. These innovations took the form either:—

(*a*) of special series of lectures by eminent men of learning, invited to visit the university from India or abroad, or

(*b*) of university chairs in certain subjects in which the university desires to specialise, or

(*c*) in the most complete form, of honours schools or post-graduate classes directly conducted by the university.

(*a*) University lectures.

105. The delivery of courses of lectures by distinguished scholars has been a particular feature of the work of the Calcutta, Madras and Punjab Universities. Professor Oliver Elton, M.A., D.Litt., of the Liverpool University visited Lahore at the invitation of the Punjab University and subsequently delivered a course of lectures at Madras. The Madras University also secured visits from Dr. W. A. Craigie, Professor of Anglo-Saxon at Oxford, and Professor J. S. Mackenzie of University College, South Wales. Other distinguished visitors to this country who delivered lectures at the invitation of the Punjab University were M. A. Foucher, the eminent Archæologist, and Dr. E. L. Frida Fowler, D.Litt., of Paris, the former of whom also lectured on behalf of the University of Calcutta. Professor C. V. Raman accepted invitations from the Madras and Punjab Universities to describe his scientific researches, Sir P. C. Ray visited

[3] Bombay report.

the Madras and the Benares Hindu Universities and Sir Jagdish Bose the Bombay University, for the same purpose. The Calcutta University arranged for lectures from a number of distinguished professors of other Indian universities including Dr. Rushbrook Williams, Professor R. K. Mukerjee, and the late Mr. R. S. Trivedi. These visits form an interesting illustration of the value of university co-operation.

106. The example set by the Universities of Calcutta, Madras and Allahabad in the creation of university chairs has been followed by other universities. At Allahabad the chair of Economics was held by Dr. Stanley Jevons. The University Department of Economics has been much engaged in research on currency problems and rural economics. The Chair of History was held by Dr. Rushbrook Williams till his transfer to the Government of India in April 1921 when he was succeeded by Dr. S. A. Khan. Valuable research work on various periods of Indian History has been accomplished and a library has been built up of which it is said that " no other university library in India can boast of such continuous connected data for the study of Indian History."[1] A chair of geography was created in 1919 but hitherto no suitable incumbent has been found for the post. The endowment of a chair of civics and politics has been offered by the Government of the United Provinces. Meanwhile the chair of post-Vedic studies was abolished on the death of the incumbent, Dr. Venis, in 1918. (*b*) University chairs.

In Madras the chairs of comparative philology and of Indian economics have been vacant since the retirement in 1919 and 1921 of Dr. Mark Collins and Dr. Gilbert Slater. The Department of Economics has, however, been strengthened by the appointment of an assistant professor and two readers. The chair of Indian history and archæology is held by Rao Sahib Dr. S. Krishnaswami Ayyangar.

In Bombay a chair of sociology was created for the term of three years in 1919 to which Professor Patrick Geddes, late of the St. Andrews' University, was appointed; an assistant professor was added in 1921. The Department of Sociology has issued several publications and monographs on such subjects as the housing problem in Bombay. A Department of Economics was also opened in 1921, when Mr. K. T. Shah was appointed professor with Mr. C. N. Vakil as his assistant. In both departments research is combined with the preparation of students for post-graduate degrees.

107. A more complete development in university teaching is the system of honours schools introduced by the Punjab University. The organisation of the teaching in these schools is controlled by a whole-time officer of the University entitled (*c*) Punjab University honours schools.

[1] United Provinces, p. 27.

"the Dean of University Instruction." His functions are to co-ordinate the work and aims of different honours schools, to advise the Vice-Chancellor and the Syndicate with regard to the said schools and to develop in general the teaching functions of the University with the co-operation of the colleges. Mr. A. C. Woolner, late Registrar of the University, has been appointed to this post. Honours schools have been instituted in Arabic, Sanskrit, botany, zoology and mathematics and the University also conducts post-graduate instruction in economics. The University has a whole-time chair of mathematics occupied by Professor C. V. H. Rao and a chair of economics occupied by Mr. W. H. Miles: it has also appointed professors in botany, and zoology from the staffs of the constituent colleges. "The aim of university teaching in the Honours schools is to give an improved type of instruction, with some personal contact between teacher and pupil and lesser recourse to lectures and text books, to the abler minority among the students in the belief that this improved teaching, though in the first instance limited to a minority, will in the long run react on the spirit and methods of teaching throughout affiliated colleges of the University."[5]

(*d*) Cal utta University post-graduate department.

108. The most comprehensive scheme of university teaching adopted by an affiliating university in India is the post-graduate department of the Calcutta University. At the beginning of the quinquennium all M.A. teaching, except in a few *mofussal* colleges, was taken over by the University itself. There can be no question that by means of its post-graduate classes the Calcutta University is performing one of the most valuable functions of a university, the promotion of research. But the organisation of the department has been criticised on the ground that the staff is excessive and that there is no discrimination exercised in the choice of the students, many of whom are engaged at the same time in working for a law degree. At the beginning of the academic session, 1916-17, there were 1,258 students in the university M. A. classes (excluding attendance at the Presidency, Dacca and Scottish Churches Colleges) for the teaching of whom a staff of 46 whole-time teachers and a few part-time lecturers was provided. In 1921-22 there were 1,234 students with a staff of 233 professors, assistant professors and lecturers, including part-time teachers. The large increase in the proportion of staff to students is partly accounted for by the extension of science teaching. Of the 1,234 students 189 were in the science classes with a staff of 54 as against 1,045 in arts classes with a staff of 179. But in such subjects as anthropology (eight teachers, nine students) and experimental

[5] Punjab University Report (Ms.).

psychology (eight teachers, nine students) there is a much greater disparity. "Previously to the great growth of purely university post-graduate teaching, the colleges, and especially the Presidency College, endeavoured to restrict the numbers of those who entered their M.A. and M.Sc. classes by demanding a certain degree of attainment, marked by honours or distinctions, in the post-graduate subject proposed. Apparently in the university classes, there is no such small-meshed sieve before entrance; in practice a graduate, pass or honours, is admitted to the post-graduate course in any subject he chooses."[6] The increase in the staff is also due to the opening of new branches of post-graduate study, such as Anthropology, Ancient Indian History and Culture and Indian Vernaculars. The latter department for the critical, scientific and comparative study of Indian Vernaculars was opened in 1919, the first M.A. examination in the subject being held in 1920. "Arrangements have been made for instruction in Bengali, Uriya, Hindi, Maithili and Guzerati as principal vernaculars and in Bengali, Assamese, Uriya, Hindi, Mahrathi, Guzerati, Telugu, Tamil, Kanarese, Malayalam, Sinhalese, Maithili, Urdu, Prahut, Pali and Persian as subsidiary languages."[7] The University College of Science was founded out of the gifts of 14 and 10 lakhs of rupees made by Sir Tarak Nath Palit and Sir Rash Behari Ghose, respectively, in the last quinquennium. In the present quinquennium a further legacy of some 5½ lakhs was received from the estate of the late Kumar Guruprosad Singh of Khaira. Out of the interest of this sum the University has established five new chairs, in Indian fine arts, phonetics, physics, chemistry and agriculture. Another gift of 2½ lakhs, under the will of the late Sir Rash Behari Ghose, established a number of travelling research fellowships open to graduates of the University. A further interesting development of university work has been started by the beneficence of Mr. Prankrista Chatterjee, who in 1921 made over 100 bighas of land and an endowment of Rs. 1,800 per annum to start a University Mining school.

(e) Colleges responsible for bulk of teaching.

109. It will be noted that, prior to the establishment of unitary teaching universities, the teaching functions assumed by universities have all been confined to higher work with the more advanced or more brilliant students. The bulk of the university teaching has been, and still is in the case of affiliating universities, in the hands of the colleges. It was suggested to the Calcutta University Commission that the development of university teaching should continue on these lines, the university gradually assuming the responsibility

[6] Bengal, p. 9.
[7] Calcutta University Report (Ms.).

for all "honours" or post-graduate work leaving the "pass" students only to the care of the colleges. This suggestion was rejected by the Commission on the ground that, in the interests of the teachers and the taught, no sharp dividing-line should be drawn between the work of the "pass" and "honours" students. The Commission preferred to recommend the gradual development at suitable centres of unitary teaching universities, such as have actually been started at Dacca, Lucknow, Aligarh and Benares. In these universities the whole of the graduate and post-graduate teaching is conducted by the staff of the university and the colleges have assumed the character of halls of residence. A compromise has been necessary at such centres as Rangoon and Delhi, where the bulk of the teaching is as yet conducted by the colleges, arrangements for co-operation being made by the university, and at Allahabad, where the reconstructed university has both a teaching and an affiliating side.

110. India is a land of large distances and small towns. The number of centres, at which there is a sufficient student population to attend, and, what is even more important, a sufficient number of educated persons to administer a university is very limited. Although the growth of unitary teaching universities has been such a marked and such a satisfactory feature of the development of higher education during the past five years, there will always be in India a need for universities of the affiliating type.

Changes in conditions of admission to universities. (*a*) Intermediate colleges.

111. Before dealing with the work of the colleges I must make mention of certain changes in the conditions of admission which may in time have a marked effect on the character of university education. Of the recommendation of the Calcutta University Commission that entrance to the university should be postponed to the intermediate stage, and of its acceptance at Dacca and in the United Provinces I have already written. This change entails either the addition of two intermediate classes to high schools or the creation of separate intermediate colleges. The former solution has been generally adopted in the United Provinces: the latter was the one favoured by the Calcutta University Commission, which laid much stress on the important functions which this new type of institution might discharge in the preparation of students for the university and in the provision of vocational training. Although the matriculation or school final examination has been retained as the qualification for admission to universities outside the United Provinces and Dacca, there has been a movement elsewhere in the direction of starting intermediate colleges. In the Punjab, for example, intermediate colleges have been opened at eight centres. They do not as yet provide any vocational courses. Considerations of expense and the lack of effective

demand have contributed to restrict their activities. They should, however, serve a useful purpose in checking the influx of first and second year students to Lahore and thus lightening the work of the degree colleges. An intermediate college of the type recommended by the Commission has been opened at Patna, comprising the two high classes of the collegiate school and the two intermediate classes of the Patna College. "When the institution was first established no attempt was made to amalgamate the two sections, the college classes being taught by college methods and the school classes by school methods. Even then, however, there were difficulties, for the staff and students of the college section regarded it as beneath their dignity to associate with school teachers and school boys, respectively. Subsequently, endeavours have been made to fuse the whole institution into one, but further problems have now arisen. Thus the teachers who were recruited for college work and the students in the I.A. classes would object to a vacation shorter than a college vacation while there is no reason why the school section should enjoy longer vacations than at present. Again, some of the college teachers do not care to teach school classes, while if the teachers recruited for school work are required to teach college classes there is some risk that the standard of instruction in those classes may deteriorate. Further, the teachers of the college classes do not appear to have appreciated the fact that when the institution was fused it was intended that the whole should be taught by school methods, lectures and tutorial work in the college classes being abandoned, and some of the teachers have instead done little more than lecture, abandoning their tutorial work and thus making things worse than they were before."[8]

112. A second change of importance during the quinquennium has been the abolition of the age limit for matriculation by the universities of Bombay, Allahabad and Patna. Similar action is being contemplated by the Madras, Benares and Punjab Universities. Previously admission to the examination was confined to boys of 15½ years or 16 years of age. This restriction has now been abolished. It is too soon to judge of the effect of this change. So long as the secondary school course is one that an ordinary boy cannot cover in less than ten years it is not probable that many boys will be able to pass matriculation at an earlier age than fifteen. (*b*) Abolition of age limit for matriculation or school leaving examinations.

The statistics given in general table X show that of 44,469 students attending colleges in India in 1921 only 129 were under sixteen years of age, and that of 60,797 boys in the matriculation classes of high schools all but 2,000 were over fifteen years old. The median age for the matriculation class

[8] Bihar and Orissa, p. 42.

is 16 and for the first college year 17. The "matriculation" or top class in an Indian high school is essentially an examination class in which the energies of the teachers and the pupils are concentrated on the text-books and syllabus prescribed for the final examination. It does not offer the same opportunities for widening the range of knowledge and broadening the general outlook that are afforded by the sixth form in an English secondary school, which make it well worth while for older boys to remain in school long after they possess the minimum qualifications for admission to the university.

(c) Introduction of vernacular medium for instruction.

113. A third change of importance is the proposed adoption by universities of the vernacular as the medium in some or all of the subjects of their matriculation examination. The present position is as follows:—

The Senate of the *Patna University* has passed a resolution to the effect that the medium of examinations *may be* the vernaculars after 1923 and *shall be* the vernaculars after 1928, but the necessary change in the regulations has not yet been sanctioned by Government. The Senate of the *Calcutta University* also proposes that for matriculation instruction and examination in all subjects, except English, shall be conducted in the vernacular. The Senate of the *Punjab University* has decided to give the option to the candidates in the matriculation and school-leaving certificate examination of answering the questions in history and geography either in English or in Hindi, Urdu or Gurmukhi and the proposal is to be submitted to Government for sanction. As has already been stated elsewhere, the *Osmania University* imparts its teaching through the medium of Urdu and a Bureau has been formed in connection with it to prepare suitable text-books.

114. It is impossible to determine the effect of the proposed changes. Their introduction is complicated by the multiplicity of the vernaculars in use in every province. No one examiner, for example, will be able to correct history papers written in several vernaculars nor even to co-ordinate the results of marking by assistant examiners conversant with the different languages used by the candidates. The question is dealt with in Chapter XVIII of the report of the Calcutta University Commission. The Commissioners as a result of their investigations recommend that at the "high school" or matriculation examination "candidates should be permitted to answer either in the vernacular or in English, except in the subjects of English or mathematics in which English should be compulsory." They do not, however, offer any suggestion for standardising the results.

General developments in the Colleges.

115. For an account of any developments in the colleges attached to affiliating universities one must turn to the reports of the Directors of Public Instruction. University reports

are ordinarily confined to a record of changes in statutes and regulations and of the activities of the central university bodies: mention is rarely made of the changes made in the buildings, staff, or work of the colleges. This is an interesting illustration of the relationship of the affiliating universities to their constituent members.

Statistics of colleges.

116. At the close of the quinquennium there were 231 colleges of all kinds in British India with a total enrolment of 59,595 students. Of these, 167 were arts colleges (including 15 oriental colleges) with 45,933 students. The detailed figures relating to the English arts colleges, with which this section is mainly concerned, are given in the table below. The oriental colleges and colleges for professional and technical training are dealt with elsewhere.

English Arts Colleges, 1921-22.

Province.	—	Government.	Board.	Aided.	Unaided.	TOTAL.
Madras	Institutions	10	1	28	—	39
	Scholars	1,968	53	6,206	—	8,227
Bombay	Institutions	4	—	6	—	10
	Scholars	1,378	—	3,451	—	4,829
Bengal	Institutions	8	1	13	14	36
	Scholars	3,102	173	5,775	7,892	16,942
United Provinces	Institutions	5	—	17	3	25
	Scholars	691	—	3,332	1,175	5,198
Punjab	Institutions	3	—	7	5	15
	Scholars	746	—	2,251	1,379	4,376
Burma	Institutions	1	—	1	—	2
	Scholars	380	—	135	—	515
Bihar & Orissa	Institutions	5	—	4	1	10
	Scholars	1,155	—	889	31	2,075
Central Provinces & Berar	Institutions	3	—	1	—	4
	Scholars	543	—	134	—	677
Assam	Institutions	2	—	—	—	2
	Scholars	752	—	—	—	752
North-West Frontier Province.	Institutions	—	—	3	—	3
	Scholars	—	—	193	—	193
Minor Administrations	Institutions	1	—	5	—	6
	Scholars	69	—	1,371	—	1,440
INDIA, 1921-22	Institutions	42	2	85	23	152
	Scholars	10,784	226	23,737	10,477	45,224
INDIA, 1916-17	Institutions	30	4	69	22	125
	Scholars	10,547	456	23,738	11,696	46,437

Of the total number of students (45,224) 1,263 are women. The enrolment of women shows an increase of 50 per cent. which is gratifying, especially in view of the fact that there has been a decrease of 1,213 students or 2·6 per cent. in the total number of arts students. This falling off in numbers may be ascribed partly to the non-co-operation and *khilafat* movements and partly to the general economic distress. But there is also some cause to think that a preference for professional training has been a powerful secondary influence in bringing about the decline referred to above. It is noteworthy that the number of students in professional colleges rose from 11,504 to 13,662.

117. The classification of students according to race or creed is as follows:—

Race or creed of arts scholars.

Community.	1916-17.	1921-22.	Increase or Decrease.
Europeans and Anglo-Indians . .	896	976	+80
Indian Christians	1,391	1,817	+426
Hindus—Brahmans . . .	15,922	14,920	—1,002
Non-Brahmans . . .	21,403	20,551	— 852
Muhammadans	4,881	5,371	+490
Buddhists	515	274	— 241
Parsis	573	560	— 13
Others	856	755	— 101
TOTAL .	46,437	45,224	—1,213

The above figures are instructive. It is interesting to find that the number of Muhammadan scholars shows a substantial increase despite the adverse political movements that influenced the community during the period. The heavy drop in the number of Buddhist scholars is perhaps accounted for by the agitation which was set on foot at the inauguration of the Rangoon University (see paragraph 93).

Buildings.

118. In spite of the restrictions imposed by the high cost of materials, considerable building activity is reported during the quinquennium. The following are among the most notable university and college buildings constructed or under construction during these years. At the Benares Hindu University a new Arts and Science building and an Engineering College have been completed on a site presented by the Maharajah of Benares. The cost of the new buildings was defrayed from subscriptions. The total amount of such contributions to the University, promised or realised, is 133 lakhs. The Bombay University is making large extensions to the main university building. In Lahore a new Law College and a chemical laboratory for the Punjab University are under construction and a hostel for 200 students has been built for the Government College.

119. The Ravenshaw College at Cuttack was moved to new buildings in July 1921, where, in addition to liberal teaching accommodation, quarters have been provided for 18 members of the staff and for 416 resident students at a cost exclusive of fittings of approximately eleven lakhs. A complete new set of buildings has been erected for the Tej Narayan Jubilee College at Bhagalpore at a cost of eight lakhs towards which a munificent donation of Rs. 3,29,000 was contributed by the Rajas Bahadur of Banaili. Buildings estimated to cost thirteen lakhs were commenced in 1918 for the King Edward College, Amraoti, and were nearly completed at the close of the quinquennium.

120. The United Provinces report the erection or extension of laboratories in many colleges to meet the increasing demand for science teaching. The Lucknow Christian College, for example, has spent three lakhs on the Badley science block. An appeal to the commercial community of Cawnpur resulted in promises of 4½ lakhs towards the construction of a college and a gift of one lakh has been received from Lala Hardat Rai, while Rai Bishamber Nath Bahadur presented land on the banks of the Ganges of the same value. The foundation stone was laid by His Excellency Sir Harcourt Butler in March 1920.

The tutorial system

121. A more general use of the tutorial system is reported from several provinces, but many aided colleges are understaffed for work of this kind. In the new teaching universities tutorial work is a distinguishing feature. In the Canning or Arts College of the Lucknow University "students are encouraged to form their own groups so as to foster the spirit of companionship in work, and, at intervals of a week or a fortnight, they meet with their tutor to discuss written work and talk over their subjects of study. In addition to the tutorial work each student is now assigned to a senior member

of the staff called a house tutor, who is to act as his guardian through all his course in the University. Not more than 25 will be assigned to any one member of the staff."[9] At Dacca every student is attached to a teacher for general guidance. Honours students in addition are under the direct tutorial supervision of the head of the Department. "As an incentive to constant and uniform effort throughout a student's career the tutorial record is, by ordinance, taken into account at the settlement of the examination results. A student not in residence at a Hall must be attached to one for tutorial purposes and for the social benefits which the system is specially devised to procure for him."[10] That these 'social benefits' may, in some cases, outweigh the educational is suggested by the Principal of the Government College, Lahore, where "in most cases the tutorial group has been allowed to degenerate into a composition class or it has merely served the purpose of a subsidiary debating society, having its annual photograph and feast, that tutor winning the greatest glory that could afford to feast his wards oftener than others."[11] The tutorial system has in it the seed of great good. It serves to bring every student into direct relationship with some member of the staff. At its worst it may develop into a sort of intensified coaching for an examination. At its best it should be directed "to encourage originality and individual effort, to ensure that each student shall be enabled to learn something of intellectual production as well as of reproduction."[12]

Indian students abroad.

122. In spite of the opportunities for advanced study and research now afforded by Indian universities many Indian students still proceed to Europe, Japan and America for further study after graduation or even after passing the Intermediate examination. The majority of these desire to qualify for the Bar or to study technical subjects, such as engineering; further mention of such students will be found in paragraph 493. There were in 1922 one hundred and twenty-one Indian students in residence at British universities preparing for arts or science degrees. Such degrees are held to connote and do undoubtedly connote a higher standard of general education than an ordinary Indian degree. This superiority does not result from any deficiencies in the courses of study prescribed by the Indian universities for graduation. Apart from such natural advantages as a student may gain from travel and wider experience, the essential difference lies in the methods in which the courses are studied. Of the methods pursued in Indian colleges the Calcutta University Commission record abundant evidence. The testimony received from

Methods of study.

[9] United Provinces, p. 35.
[10] Bengal, p. 12.
[11] Punjab, p. 59.
[12] Bengal, p. 12.

all parts of India was unanimous in declaring that teaching was entirely subordinated to examination. The experience of the Commission from their own visits to lecture rooms was that "except in a few striking instances the teaching was directed exclusively and narrowly to the examination syllabus." The teacher, it was reported to them, who attempts to widen the interests of his pupils in a subject by introducing matter outside the examination syllabus is held of less repute than the one who confines himself to the dictation of suitable notes. These notes are memorised by the student, for the Indian student's power of memorisation is quite exceptional. One professor stated that the "students preparing for the M.Sc. examination commit to memory the contents of two volumes of Richter's Organic Chemistry and Roscoe and Schorlemmer's standard works on Inorganic Chemistry." In the case of junior students this remarkable method of study is due in part to their incomplete knowledge of the medium of instruction—English—but is chiefly adopted because it has been proved by experience to be the simplest method of passing examinations. One experienced examiner writes:—"the best student, judged by examination results, is the best memoriser. Every examination in which I have taken part is proof positive of this statement. Individuality in treating questions is a very rare thing. The examiner is more a recorder of mistakes in memory than a judge of mental calibre in the proper sense." Memorising.

123. It would be wrong to conclude that the conditions are everywhere so bad as those described in the preceding extracts. But the dominance of the examination is universal. The explanation for this is simple; a degree is an indispensable qualification for admission to the higher professions and to Government service; indeed, in recent years, owing to the large output of graduates it has become customary to require a degree as a qualification even for clerical posts. Against this development Mr. Anderson protests in the following passage. "The whole tone and ideals of collegiate education are degraded by the idea, unfortunately prevalent, that it is an important duty of an arts college to train men for clerkships. The greatest in the land have lectured students on festival occasions that they should learn for learning's sake and that the be-all and end-all of a college career should not be a Government appointment; yet the imposition of a degree qualification for clerks would appear to be the negation of these excellent principles."[13] Of the demoralising effects of examinations on the character of the teaching I have written further in the following chapter. It is rare to find that a college career has inspired a student with a love of learning. The examination evil.

[13] Punjab, p. 37.

The words of Spencer quoted by a Bengal headmaster are widely applicable in India to-day. "Examinations being once passed, books are laid aside; the greater part of what has been acquired drops out of recollection; what remains is mostly inert, the art of applying knowledge not having been cultivated."[14] Poverty prevents many graduates from buying books of their own, but all large centres are provided with libraries accessible to those who wish to read. But to the great majority of students books represent little more than vehicles for the conveyance of information. They have never appealed as a means for the enjoyment of leisure.

There remains a nucleus of keen students whose distinguished work at Indian university centres and abroad shows that it is not the capacity but the opportunity and the incentive which are lacking to transform the character of university work.

University Corps.

124. An interesting development in the corporate life of the universities has been the institution of University Corps attached to the Indian Defence Force. Such corps are now in existence at the following centres: Bombay, Calcutta, Allahabad, Lahore, Madras, Rangoon, Bankipur and Benares. Some account of the Calcutta University Corps will prove illustrative:—Raised originally in 1917, it was to have been disbanded after the termination of the War, but the success of the Corps was so great that the University was able to obtain sanction for its continuance. The corps now numbers 80 non-commissioned officers and 904 men selected from the students of affiliated colleges. It is commanded by a commandant, eight commissioned officers and sixteen Indian officers, all of whom are professors or university officials. Sixteen British instructors are permanently attached to it for training. Over sixty per cent. of the members volunteered for service, if required, during the Afghan War. During the last postal strike over 100 members voluntarily gave up their holidays for a week, returned at their own expense, and did postmen's work in the hottest part of the year, thus rendering valuable assistance to the civil authorities.

[14] Calcutta University Commission Report, Vol. II, p. 152.

Expenditure on universities by provinces in 1921-22.

Expenditure on universities.

Province.	Expenditure from				Total Expenditure.
	Govt. Funds.	Board Funds.	Fees.	Other Sources.	
	Rs.	Rs.	Rs.	Rs.	Rs.
Madras . . .	85,480	..	3,28,245	54,629	4,68,354
Bombay . . .	67,000	..	2,46,612	58,172	3,71,784
Bengal . . .	8,65,132		12,65,218	3,87,540	25,17,890
United Provinces .	6,84,673	..	2,19,131	22,59,982	31,63,786*
Punjab . . .	2,84,400	..	3,22,803	..	6,07,203
Burma . . .	1,73,779	..	17,575	..	1,91,354
Bihar and Orissa .	64,927	..	1,08,762	1,07,581	2,81,270
Central Provinces & Berar.	..	..	..	..	..
Assam . . .	..	..	..	..	..
North-West Frontier Province.	..	75	..	..	75
Minor Administrations	2,862	..	..	..	2,862
India . 1921-22	22,28,253	75	25,08,346	28,67,904	76,04,578
1916-17	*4,82,637*	*25*	*15,97,885*	*4,71,378*	*25,51,925*

N.B.—Figures for universities in the *Indian States* are not included in this statement.
**Allahabad* = Rs. 2,82,075, *Lucknow* = Rs. 12,59,053; *Hindu* = Rs. 12,55,948; *Muslim* = Rs. 3,66,710.

125. The large sums expended by Bengal and the United Provinces are accounted for in the former case by the opening of the Dacca University and in the latter by the capital and other expenditure on the new universities of Lucknow, Benares and Aligarh. The Calcutta University received from Government during the year grants amounting approximately to Rs. 2,64,000. It received during the quinquennium in grants from the Government of India and the Bengal Government no less than Rs. 11,78,083, the annual recurring allotment being Rs. 2,57,000 (of which Rs. 1,28,000 is for the University and Rs. 1,29,000 for colleges). The Central Government makes a grant of one lakh annually each to the Benares Hindu and the Aligarh Muslim Universities, and this is included in the

table above under Government expenditure in the United Provinces. A grant of Rs. 75,000 was included in the 1922 estimates for the Delhi University.

Expenditure on arts colleges.

126. The foregoing statement does not include ordinary expenditure on arts colleges, which is shown in the table below.

Expenditure on arts colleges, 1921-22.

Province.	Expenditure from				Total Expenditure.
	Govt. Funds.	Board Funds.	Fees.	Other Sources.	
	Rs.	Rs.	Rs.	Rs	Rs
Madras . .	5,58,296	5,565	8,44,771	5,03,009	19,11,641
Bombay . . .	5,21,023	16,225	4,52,379	2,59,507	12,49,134
Bengal .	10,41,711	200	12,71,953	3,37,571	26,51,435
United Provinces	8,72,233	20,396	4,28,793	7,10,125	20,31,547
Punjab .	4,19,983	1.967	3,90,505	2,15,947	10,28,402
Burma . .	2,43,973	..	49,191	90,251	3,83,415
Bihar & Orissa .	5.42,535	..	1,49,281	35,280	7,27,096
Central Provinces and Berar.	2,52,750	..	58,348	29,943	3,41,041
Assam . . .	2,32,858	..	41,300	..	2,74,158
N.-W. F. Province .	94,944	..	12,740	24,308	1,31,992
Minor Administrations	1,46,360	2,805	80,709	82,603	3,12,477
India . 1921-22	49,26,666	47,158	37,79,970	22,88,544	1,10,42,338
1916-17	*27,18,764*	*71,525*	*32,59,969*	*10,53,490*	*71,03,748*

Cost of Education in a Government and Aided College.

127. The average fee paid by a student of an arts college in India is Rs. 8$2\frac{1}{2}$ per annum. This represents only one-third of the cost of his college education. To his tuition fees must be added the cost of his books and in the case of a resident student his expenses for board and lodging. These expenses have increased considerably in recent years owing to the general rise in prices and rarely amount to less than Rs. 15 per mensem while they are often much more. The average cost to Government of a student in an arts college

(Government or aided) in India is Rs. 107½: but there is a great difference between the cost of education at a Government and a private college. In the United Provinces, for example, the annual cost of educating a boy in a state college is about Rs. 652, in an aided college Rs. 370, and in an unaided college Rs. 356. The discrepancy is even more marked in other provinces, notably in Bengal, where the corresponding figures are for state colleges Rs. 375, for aided colleges Rs. 127 and for unaided colleges Rs. 89. The range of cost in private colleges in Bengal is enormous, from Rs. 57 to Rs. 270. In this province the average student of a private college graduates at a cost of under Rs. 400, most of which he provides himself in the shape of fees; the average student of a state college graduates at a cost of Rs. 1,500 over two-thirds of which is borne by Government.* These figures suggest two pertinent questions which are discussed in the Bengal report. Is this very disproportionate expenditure of Government money justifiable by results? and is the system of choice sufficiently discriminating to ensure that the lucky individual who enters a Government college is deserving of a special subsidy of Rs. 300 or Rs. 500 a year from Government? The competition for admission to Government colleges is always very keen and the greatest care is exercised in the selection of candidates. Students attending Government colleges should therefore be, and they undoubtedly are, among the best of those on the rolls of the university. But the justification for the disproportionate expenditure on Government colleges must be sought neither in the intellectual pre-eminence of their students nor even in the imponderable influences on character and manners on which these institutions pride themselves. There are many private colleges, which in the quality of the teaching they provide, in the conditions of the corporate life with which they surround their students and in the ideals which actuate their staff are no whit inferior to Government colleges. State colleges were founded as pioneers, they were retained as models and if the excessive expenditure on them needs justification it must be justified on the ground that they maintain a standard which reacts through the force of competition on private colleges.

The increase in expenditure.

128. Government colleges are staffed by members of the Indian, Provincial, and Subordinate Educational Services. Of the increased expenditure from Government funds a considerable amount has been needed to meet the additional cost of the services after their re-organisation. Of the rest much has been spent on grants for raising the pay of teachers in

* The actual cost in a Government College is really considerably higher as the figures given take no account of the money spent on pensions to the staff or the maintenance of the buildings, etc.

aided colleges. Grants to colleges are not governed, as a rule, by such strict regulations as grants to schools. They are assessed with reference to the particular needs of each institution.

129. One of the most encouraging features of the past five years has been a large influx of contributions from private sources towards the cost of university education. It will be observed that the increase under this head is from Rs. 4,71,178 to Rs. 28,67,904. This sum includes of course large subscriptions made towards the initial cost of the Benares and Lucknow universities. There is still a tendency to earmark private benefactions for the award of medals or prizes on the results of university examinations.

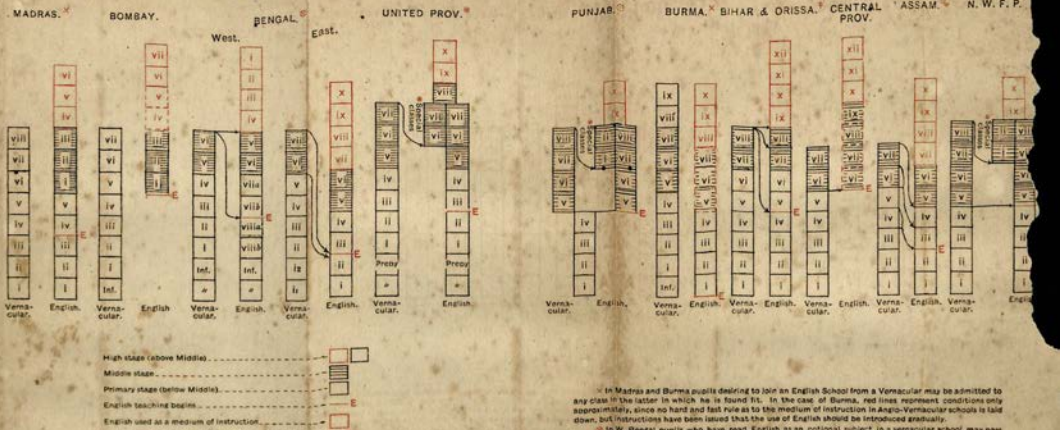
Scientific Research.

130. The position of the Research Institute founded at Calcutta by Sir J. C. Bose has been consolidated by an allotment to it from central revenues of a grant of Rs. 78,000 in 1921-22, which has since been raised to Rs. 1 lakh a year. Among the research institutions established during the quinquennium the most remarkable is the Royal Institute of Science, Bombay. Its annual recurring expenditure amounted to Rs. 1,48,389 in 1921-22, while the total expenditure sanctioned by the Government of Bombay up to January, 1923, stood at Rs. 20,22,436. The Institute, which is designed to conduct undergraduate teaching side by side with post-graduate research in the Departments of Chemistry, Physics and Biology, has experienced some difficulty in securing affiliation with the University of Bombay.

Personalia.

131. Among the notable figures who retired from university life during the quinquennium are the Revd. Dr. Sir James Ewing, M.A., D.D., LL.D., Litt.D., C.I.E., some time head of the Forman Christian College, Lahore, and for many years Vice-Chancellor of the Punjab University; the Revd. Dr. D. Mackichan, M.A., D.D., LL.D., late Principal of the Wilson College, Bombay, and Vice-Chancellor of the Bombay University; and Rai Bahadur Dr. Sir Sunder Lal, Kt., LL.D., C.I.E., the first Vice-Chancellor of the Benares Hindu University, who died on 13th February 1918.

SCHEME OF SCHOOL CLASSES.



* In Madras and Burma pupils desiring to join an English School from a Vernacular may be admitted to any class in the latter in which he is found fit. In the case of Burma, red lines represent conditions only approximately, since no hard and fast rule as to the medium of instruction in Anglo-Vernacular schools is laid down, but instructions have been issued that the use of English should be introduced gradually.

* In W. Bengal pupils who have read English as an optional subject in a vernacular school may pass from standard vi into class ix, others must pass to class vii. In E. Bengal Vernacular pupils with some knowledge of English may pass into class ix or x.

* In the U. P. the bottom four classes have been detached from Govt. High Schools and form a distinct class of schools known as 'Preparatory Schools'.

* In the Punjab the present tendency is to detach from each Govt. High School the first four classes.

* In B. & O. those who have not read English ordinarily pass into standard v, but in some schools they pass into a class (below class ix) in which special instruction in English is given to such boys. Those who have read English may pass into class ix, standard vii, standard vi or standard vi according to the progress they have made in that language.

* In Assam a boy who has passed class iv of a vernacular school may be transferred into a class for which his vernacular education fits him, if he has acquired sufficient English for that class. Boys from the higher classes of vernacular schools knowing no English are passed on transfer rapidly through the middle English course, in high schools, arrangements being made to give them special instruction in English.

* In the U. P., Punjab and the N. W. F. P. there are two special classes attached to certain Anglo-Vernacular Schools. Boys who have passed the Vernacular Final Examination and desire to enter an Anglo-Vernacular School are required to spend two years in these classes, mainly in the study of English, before proceeding to class viii in the U. P. and class ix in the Punjab and N. W. F. P. In the N. W. F. P. boys from a lower middle school may join special class I and after studying English for one year may be admitted to the ordinary class vii; but in the schools where provision is not made for special classes, boys, after passing the Vernacular Final Examination, frequently start English in class v for three months, continue in class vi for the next three months and in class vii for the next six months, and finally spend a year in class viii before being promoted to the high depts. In the Punjab pupils in vernacular middle schools who have passed in optional English in the Vernacular Final Examination can proceed straight to class ix.

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October, 1923.—No. 74 S.S. I.

CHAPTER IV.

SECONDARY EDUCATION (BOYS).

Schools and Scholars.

Statistics.

Year.	High Schools.		Middle English Schools.		Middle Vernacular Schools.		All Secondary Schools.	
	Schools.	Scholars.	Schools.	Scholars.	Schools.	Scholars.	Schools.	Scholars.
1916-17	1,584	547,509	2,906	328,766	2,514	230,846	7,004	1,107,181
1921-22	2,040	559,258	2,864	264,158	3,249	315,072	8,153	1,138,488
Increase or Decrease	+456	+11,689	—42	—64,608	+735	+84,226	+1,149	+31,307

132. The foregoing statistics are to this extent misleading that, while on the one hand they do not include fourteen thousand scholars reading in the middle classes of vernacular schools in Bombay and Madras, where all vernacular schools are classed as primary, they do include no less than 526,000 scholars who are reading in the primary departments attached to secondary schools. The number of scholars in the secondary stage of instruction is thus only about 627,000. Secondary schools are regarded as integral units for purposes of inspection, expenditure and staffing; they are dealt with as such in provincial reports and are so treated in this chapter. But it is well to bear in mind the presence of these half million primary scholars in high and middle schools when the cheapness of secondary education in India or the proportion of public funds spent on primary and secondary education is called in question.

Vernacular middle schools present peculiar problems of their own and will, as in previous reviews, form the subject of a separate section. I have so far differed from my predecessors in that I have, for reasons therein explained, included the section on vernacular middle schools under the heading of secondary education.

133. There has been an increase of 1,100 in the number of secondary schools in India during the quinquennium and of 31,000 in the number of scholars attending them. A large part of this increase is found under the head of vernacular middle education in the Punjab and is due rather to a change in classification than to an increase in the number of secondary schools and scholars.

134. Secondary English schools, schools in which English forms a part of the regular curriculum, have increased from

4,490 to 4,904 but the attendance at them has fallen from 876,335 to 823,416. In this connection the figures given in supplemental table 21, showing the annual increase and decrease in schools and scholars, are instructive. They show, as might be expected, that the most serious fall (—56,000 scholars) occurred in 1920-21, the non-co-operation year, Madras, the Punjab and the North-West Frontier Province being the only provinces to weather the storm. The next year shows a further fall of 32,000, but Bombay and Burma have now recovered from the shock, while Madras for the first time shows the effect of it. The figures for Bengal with a constant decline in attendance from year to year are disheartening and it is little consolation to find that the number of schools recognised as high schools has increased by 180 or 25·8 per cent. while the number of scholars decreased by 27,440 or 12·5 per cent.

Causes for decline in Anglo-Vernacular Schools.

135. That the immediate cause for the fall in numbers during the last two years was the non-co-operation movement is unquestionable. But the effects of this attack on the secondary school system would not have been so serious had it not coincided with a period of great economic depression. "The year 1920-21 was the year of great non-co-operative activity in the student world, and though this activity persisted in 1921-22, it did not as a rule take the form of a persuasion to boycott schools and colleges except temporarily and as a means of political protest. This would point to the fact that there is some deeper-lying motive, which, on examination of the economic state of Bengal for the last two years, reveals itself as poverty. The increase in the number of high schools connotes greater accessibility; the decrease in the number of pupils, apart from purely political considerations, must imply either an inability to take advantage of that increased accessibility, or a growing distrust of the value of the article supplied. In the last review it was observed that 'parents prefer to send their children to secondary rather than to primary schools.' If this were so in 1917, and if no basic change has occurred in the attitude of parents since then, it would seem that it is lack of means, not lack of will, that has caused these disturbing decreases."[1]

"Owing to the higher cost of living parents are inclined, and, in some cases compelled, to abandon all thoughts of the social prestige which education brings and make their sons wage-earners at as early a date as possible. They are further induced to do so by the increase in the rate of wages for uneducated and unskilled workers of all grades."[2] The Inspector

[1] Bengal, p. 27.
[2] United Provs., p. 48.

of Schools, Lucknow Division, is probably correct in presuming that "the present stagnation will cease when the cost of living is reduced and when industrial expansion affords greater opportunities to the well-educated boy."[3]

Increase of Anglo-Vernacular Schools not necessarily a healthy sign.

136. The increase in the number of secondary English schools is not altogether a healthy sign. It may mean, and in some parts of India undoubtedly has meant, the lowering of the standard required for recognition by the universities, that is to say, it may connote not an increase in the facilities for secondary education to meet an increased demand, but only a looser interpretation of what secondary education signifies. It may also mean a diffusion of effort with a consequent loss of efficiency, two small and inferior schools being maintained at a cost and with an attendance sufficient only to support a single good school. That the standard of secondary education has been lowered in Bengal is undeniable. "Recognition (by the University of Calcutta) has become cheap and shows a tendency to become cheaper still. An impression is gaining ground that it may be had for the asking, seeing that cases are very rare in which it has been refused . . . . Oftener than not, recommendations of inspecting officers of the department carry little or no weight, and recognition is given to even such schools as scarcely survive the exhilaration of obtaining it. Recognition in fact is considered to be the *summum bonum* in the career of a school, and all incentive to improvement disappears as soon as it is obtained; for the authorities of the school are pretty sure that, once granted, it will never be snatched away."[4] Mr. Cunningham quotes the case of a school recognised by the Syndicate in opposition to his recommendation which had a total salary bill of Rs. 110 a month and no other claims to recognition.

137. The suggestion that the increase in the number of schools is not justified by the increased demand is borne out by the fact that the average attendance at a high school in India has fallen from 312 to 217. The evils attendant on this unnecessary multiplication of schools are mentioned in several reports. "There are now in certain parts of the (Agra) Division, notably in Agra city and district and perhaps in Aligarh, more English schools than the demand justifies. This leads to a struggle for existence which tends to weakening of discipline and to a waste of the all too limited funds available for education."[5] Mr. Anderson draws attention to the unequal distribution of secondary schools in the Punjab. "It is not uncommon," he says, "for private schools to be multi-

[3] United Provs., p. 48.
[4] Bengal, pp. 31-32.
[5] United Provinces, p. 47.

plied in urban areas in a spirit of competition. Such schools are often located a few yards from each other; sometimes even in contiguous buildings. . . . It is to be feared that the comparatively wealthy urban areas have profited by the provision of facilities for advanced school education at the expense of the poorer rural tracts."[6]

Expenditure.

Expenditure on secondary schools for boys.

Year.	Expenditure from—				Total Expenditure.
	Government Funds.	Board Funds.	Fees.	Other Sources.	
	Rs.	Rs.	Rs.	Rs.	Rs.
1916-17 . . .	55,96,459	26,90,222	1,57,21,414	39,33,337	2,79,41,432
1921-22 . . .	1,39,54,026	38,87,479	1,77,34,627	66,41,316	4,22,17,448
Increase . . .	+83,57,567	+11,97,257	+20,13,213	+27,07,979	+1,42,76,016

Share of increased cost borne by parents.

138. These figures and the statistics given in the supplemental tables 32 and 33 disclose the fact that while the average cost of educating a boy in a secondary English school has gone up 50 per cent., from Rs. 30·2 to Rs. 45·9 per annum, the parent has not been called upon to meet his share of the increased cost of education. The average annual contribution made by a parent in India towards the cost of educating his son in a secondary school has only risen from Rs. 18·1 to Rs. 21·3 as contrasted with an increase in cost to Government from Rs. 6·1 per head to Rs. 14·7. The parent certainly has had to pay a good deal more for his boy's school books, owing to the rise in prices; but even so there seems little doubt that, if the general rise in wages, illustrated in this report by the rise in the pay of the teaching profession, is taken into consideraton, secondary education is, on the whole, less expensive to the parent than it used to be.

139. In Bihar and Orissa the necessity for levying a contribution on parents towards the increased cost of the teaching staff was recognised and fees were raised in 1921, the whole of the sum so realised being earmarked for raising the pay of the teachers in aided schools. Unfortunately owing to a fall in the number of pupils attending secondary schools the teachers

[6] Punjab, p. 62.

have hitherto only benefited slightly. In Bombay too the fee rates were raised in March 1922 on the ground that "the demand for a larger increase of primary education is so insistent that for a few years to come the net expenditure of Government on secondary and higher education cannot be allowed to rise much higher: "[7] and because private institutions had found it difficult to finance themselves without raising their fees. In the United Provinces in 1917 scholars in Government schools paid Rs. 25·3 a year and in aided schools Rs. 21: in 1922 they paid in Government schools Rs. 23·5 and in aided schools Rs. 24; thus parents have directly contributed practically nothing towards the increased cost of secondary education in this province.

140. It may be suggested that instead of increasing fees larger demands might be made for subscriptions and donations. But "in the majority of cases a demand for subscriptions from private sources is unreasonable and where it has been insisted on, has resulted in false accounts and broken promises. The people of the headquarters stations have no organisation to levy a regular recurring tribute on the countryside which is responsible for the demand, and their own purses are ordinarily but thinly lined."[8] These remarks are quoted from Assam but the second sentence at least is of general application. So is Mr. Cunningham's conclusion:—"Against the proposal to raise the fee rates it may be urged that the middle classes are already hard pressed economically, and that the times are unfavourable. This is a consideration of influence and it has been given due weight. Were it just or practicable to find the funds by other means, such means would be adopted. But no such means suggest themselves, and when the choice lies between the restriction of facilities on the one hand and a slight increase of cost on the other, there is no question as to the alternative which the people interested would select."[9]

The pay of the staff.

141. Of the expenditure from public funds the greater part has been devoted to enhancing the pay of the teachers either directly in Government, board, and municipal schools or indirectly, by means of grants, in aided schools. The revision of the pay of the educational services, including the teaching staff in Bihar and Orissa and the Punjab, has been mentioned in paragraph 54. In Bombay Government schools undergraduates now receive an incremental scale of pay from Rs. 45 per mensem to Rs. 150; graduates commence on Rs. 70 and rise to Rs. 200 with a selection grade for 15 per cent. of the

[7] Bombay report.
[8] Assam, p. 39.
[9] Assam, p. 39.

cadre up to Rs. 250 per mensem and a few special posts of Rs. 250—300. In the United Provinces a time-scale of pay for Government teachers was introduced in 1921. Under this scale trained graduates start with an initial pay of Rs. 100 per mensem rising by Rs. 10 to Rs. 300, while trained under-graduates start from Rs. 50 per mensem rising to Rs. 150, 25 per cent. being permitted to go on to Rs. 200. The pay of drawing masters, maulvis, pandits and language teachers has also been enhanced. Headmasters have been put in the Provincial Educational Service on a scale of Rs. 250 to Rs. 675 per mensem with a selection grade for 20 per cent. of the cadre from Rs. 700 to Rs. 800. These rates of pay are probably higher than those in force in any other province, and it is easy to understand that the "new terms have greatly stimulated recruitment to the profession"; and that "applications for admission into the training colleges have more than doubled."[10]

Provident Funds.

142. Grants from public funds to aided secondary schools have increased from forty-one lakhs to seventy-two lakhs. Since the number of aided institutions has only increased by 294 (to 4,092), most of the additional funds have been spent in the enhancement of existing grants and have been used for raising the salaries of the teachers. Some of the new grants, for example in the United Provinces and the Punjab, have been used for the establishment of provident funds. The scheme introduced in the United Provinces applies to all *bonâ fide* teachers under forty years of age in non-pensionable employment in recognised schools. The teacher contributes $6\frac{1}{4}$ per cent. of his salary if it is more than Rs. 16 a month, and eight annas a month if it is less. The management pays a sum equal to half the contribution of the teacher. The Government pays a lump sum at the time of retirement or death equal to one-third of the sum accumulated to the credit of the teacher. The rate of interest is that of the post office where contributions are received. The scheme is compulsory for all aided schools seeking recognition for the first time after July 1921 and is a condition of any increase in aid to a school previously recognised. In the Punjab each high school is encouraged to start its own provident fund on lines approved by Government, which has drawn up a set of model rules for the purpose and makes liberal grants to approved funds.

Grants-in-aid.

143. The average annual grant to an aided secondary school in India has risen from Rs. 1,081 to Rs. 1,761 per annum. The figures given in supplemental table show such

[10] United Provs., p. 54.

diversity in the amount of the average grant paid in each province that I reproduce them here:—

Average annual grant to a secondary school for boys.

Province.	1916-17.	1921-22.
	Rs.	Rs.
Madras	1,305	2,177
Bombay	2,324	3,594
Bengal	591	756
United Provinces	3,616	6,698
Punjab	3,270	4,407
Burma	778	1,367
Bihar and Orissa	886	1,195
Central Provinces and Berar	1,751	2,172
Assam	697	957
North-West Frontier Province	5,219	5,664
Minor Administrations	3,493	3,922
INDIA	1,081	1,761

144. New systems of grant-in-aid have been introduced in Bengal and Burma. In Bengal the grant must not now ordinarily exceed in the case of high schools one-half the amount contributed from private sources and in the case of middle schools two-thirds. In Burma the general principle underlying the new rules is that Government and the management should contribute equal sums towards meeting the difference between income and expenditure. In most cases the only source of income of the management is the income from tuition fees at standard rates. A minimum scale of salaries has been laid down by the Burma Education Department. It is permissible for the department to make maintenance grants in excess of the amount ordinarily payable and to afford special relief to schools to enable them to meet an emergency. Actually such extraordinary relief had to be given at the close of the quinquennium to many schools whose finances were seriously affected by political or semi-political disturbances. Revised Grant-in-aid Rules in Bengal and Burma.

Systems of grant-in-aid.

145. The systems adopted in different provinces for the assessment and distribution of grants to aided schools vary substantially. Broadly speaking these systems fall into two categories:—

(*a*) Systems which limit the grant either to a proportion of the approved expenditure or by making it bear a fixed ratio to the sum provided by the managers from other sources, including fees. The determining factor in this case is the amount of local support accorded to each school.

(*b*) Systems which limit the grant with reference to a standard scale of expenditure laid down by Government for each type of school as sufficient to maintain it in a state of efficiency. The grant under these systems is assessed by deducting from the cost of the standard scale the income from fees at fixed rates. The determining factor in this case is the standard of expenditure prescribed by Government for each type of school.

The whole question of grants-in-aid is one of great complexity. The regulations in force in different provinces together with some account of their origin and application are fully described in Occasional Report No. 12 issued this year by the Bureau of Education, to which any one interested in this question is invited to refer.

Buildings.

146. Very little building activity is reported during the quinquennium. The difficulty during the earlier years of obtaining rolled steel beams and other building material and the high cost of such material since the war have prevented extensive operations. Government schools are, on the whole, well housed; in some cases very well housed. Aided institutions on the other hand are often located in congested and unhygienic areas where no provision is possible for playing fields. In Assam, where school burning is not uncommon, the ambition of every privately managed school is to have a corrugated iron roof.

General conditions.

147. The Indian high school, its aims, its defects and the remedies for them have been much discussed in recent years. It has been criticised because the standard of general education it provides is too low, because it provides only a general and not a vocational education, because the quality of the English teaching which it gives is so poor, because it devotes itself to the teaching of English and discourages the vernacular, and finally in general terms because it is not "national" in character.

The uniformity of the Indian High School.

One characteristic of Indian high schools which has received insufficient notice is their striking uniformity. To a reviewer this is an advantage as it permits of generalisation, but it is

in fact a very real defect. The merits and demerits of good and bad high schools vary in degree but not in kind. The organisation, methods of instruction, and the aim that inspires the work of the staff, the daily routine, the methods of study and the ambitions of the scholars differ very little whether the institution is an Islamia school on the Frontier or a Government high school in Madras. What is true of place is often only too true of time. Mr. Sanderson writes:—

"A first tour of the Lahore division, after an interval of five years, revealed an amazing rigidity in the class-room. Take English for example. In a majority of schools the method of teaching and even the actual words show no change in that time. If one visits a certain class at a certain time of the year, one finds the same sentences being taught in the same way with the same emphasis and with the same mispronunciation."[11]

The domination of the examination.

148. This lack of individuality is due in part to traditional methods of instruction which in their turn are due to the accepted aim of the secondary school. Too often the staff, the parents, the public and not infrequently the inspecting staff also gauge the merits of a high school by the percentage of successes which it obtains at the final examination. This attitude is not wholly unreasonable. So long as there is little individuality in the character of different schools there is little, except their success in examinations, to differentiate good schools from bad. Moreover it is precisely in order that his boy may pass the final examination that the ordinary parent sends his boy to a high school. Such success in itself possesses a recognised value in the Indian wage market. It also opens the door to the university; and a university career is the aspiration of nearly every high school boy. Consequently the whole atmosphere of the high school is one of preparation for the university. Nor would this afford much ground for criticism if preparation for the university meant laying the foundation of a good education. The ordinary course of study at an English Public School is, with variations introduced to meet modern requirements, designed as a preparation for the university. The essential difference between the English and the Indian institutions appears to be that the life of a Public School is not dominated by the formal courses of study, much less darkened by the shadow of a coming examination. "It is the dread of this examination test that clouds the horizon of (Indian) boys during their whole school career. What should be the happiest period in life (and is so in other countries where more fortunate conditions prevail) becomes a time of drudgery and of overstrain."[12] The Calcutta University

[11] Punjab, p. 68.
[12] Punjab, p. 69.

Commission writing on conditions in Bengal say: "Except in a few cases the schools think only of the matriculation. They make it, and it alone, their aim. They are driven to do so because the boys and their parents feel that in the present conditions of life in Bengal, success in passing this examination is the one essential reason for going through the high school course. Thus the aim of the schools is more and more narrowly fixed upon an examination. The examination takes account only of a part of what a secondary school should teach. The schools are so badly staffed that they fail to make the best use even of the course of preparation for this test, and fail even more completely in providing the rest of the liberal education which a school ought to give. The rush to the schools overcrowds their classes and makes their teaching even more inadequate. But every year the pressure grows greater and the schools are forced by it more deeply into the rut of examination routine. Thus an educational movement, which has in it many elements of generous purpose and great possibilities of public advantage, runs in a wrong channel and fails to fertilize the intellectual life of the country."[13]

Matriculation results.

149. But if the goal of every high school student is the university there are but few who reach it. Leaving out of account the numberless scholars who never even complete the course, we find that of 56,000 candidates who appeared at the final examination in 1921-22 only 15,000 joined colleges. The following table is instructive:—

Matriculation and School Final or Leaving Certificate Examinations, 1921-22.

Province.	Number of candidates.	Number of passes.	Percentage of passes.
Madras*	15	4	26·7
Bombay	6,086	3,058	50·2
Bengal†	18,076	14,200	78·6
United Provinces	6,126	2,954	48·2
Punjab	7,195	5,088	70·7
Burma	650	320	49·2
Bihar and Orissa	3,825	1,836	48·0
Central Provinces and Berar	916	420	45·8
Assam	1,083	894	82·5
North-West Frontier Province	517	319	61·7
Minor Administrations	625	379	60·6
TOTAL	45,114‡	29,472	65·3

*For the *Matriculation* examination only. The figures for the *Secondary School Leaving Certificate* Examination (11,201 candidates) are not included since there is no declaration of pass or failure in this examination.

†Includes 46 candidates and 35 passes for the *Islamic Matriculation*.

‡Exclusive of about 11,000 candidates for the *Madras S. L. C. Examination*.

[13] Calcutta University Commission Report, Vol. I, Pt. I, pp. 197-198.

150. If we concede that in the present economic condition of India the utilitarian aim of secondary education must prevail over the cultural, it is of the first importance to make the education given as useful as possible. The use of a secondary school is to prepare the best of its scholars for the university and the rest for the business of life. Entrance to the university is barred by an examination. The first step in the direction of improvement is to see that this examination exercises a healthy influence on the work of the school and is at the same time a suitable test of fitness for university studies. In this respect the school final and school leaving certificate examinations possess many advantages over the old-fashioned matriculation. Such examinations are already in existence in Madras, Bombay, the United Provinces and the Central Provinces. A school leaving certificate examination was introduced in Bihar and Orissa in 1921. An important feature of this examination is the institution of special courses designed to prepare students for commercial or clerical careers or for further instruction in special institutions. The examination at the end of the course is divided into three parts, namely a scrutiny of the record of progress in school, a public examination, and, in the case of those candidates who fail in one subject only at the public examination, an examination conducted *in situ* by the inspector, with such assistance as he may require, in order to obtain a final decision. Thus, while at the matriculation examination a student passes or fails on the written work done on one occasion, the new scheme, while giving due weight to a written examination, also takes into account the work done during the period spent in school.[14] An examination of this character should fulfil both functions of a good examination, exercise a healthy influence on the work of the school and form a fit test of admission to higher work.

Improvements in school examinations.

Bihar and Orissa.

151. In the Punjab a new examination called the matriculation and school leaving certificate examination was substituted for matriculation. It has the merit of introducing a number of alternative and practical subjects, but unfortunately " the methods of the examination are still much the same as before."[15]

The Punjab.

152. In the United Provinces " the popularity of the school leaving certificate examination has grown with the public because it, for a time, was the only approach to Government service; the department prefers it because it combines inspection and a written test: the headmaster appreciates the opportunity given to him to express his views on individuals

The United Provinces.

[14] Bihar and Orissa, p. 56.
[15] Punjab, p. 69.

and work; the divisional inspector knows that the oral and practical examinations are an extra check on schools; even the assistant master benefits from it, if he is enthusiastic and skilled, since his good work receives recognition."[16]

Bengal.

153. In Bengal "the remarks concerning the deadening effect of the matriculation examination as the ultimate goal of secondary education, recorded in the last review, still hold good, and until the high school is relieved of that dead weight there can be little or no progress. The weight must be lightened, or the school must be freed from the obligation to shoulder it."[17] It must not be inferred from the foregoing remarks that the standard of the Calcutta University matriculation is too high. On the contrary the figures from Assam given in the last statement show that, low as it was, "in a year characterised by *hartals* and distraction the results are such as to point to a relaxation amounting almost to the abandonment of standards."[18]

Assam.

With the Assam figures may be contrasted those for the Central Provinces where the boys sat for the matriculation of the Allahabad University. The number of candidates is much the same but the pass percentage is 45·8 as contrasted with 82·5 in Assam. Lest it be argued that the better results in Assam are due to the better quality of the teaching, the following statistics are given:—

Teachers in High Schools.

Province.	Total No. of Teachers.	Trained Teachers.		Graduates.	
		Number.	Percentage.	Number.	Percentage.
Assam . . .	670	185	27·6	218	32·5
Central Provinces and Berar.	359	239	66·6	260	72·4

Vocational subjects.

154. For those boys whose formal education ends with the high school the school final course offers a variety of optional subjects more directly preparatory to their future work in life. Although a certain number of candidates now take commercial subjects the remaining optionals do not appear to offer much attraction. There has been during the quinquennium a strong public demand for the introduction of more vocational

[16] United Provinces, p. 73.
[17] Bengal, p. 32.
[18] Assam, p. 51.

instruction in high schools. The most notable outcome of this demand has been the adoption by the Senate of the Calcutta University of the following additions to their Matriculation Regulations, based upon a resolution passed by a conference of headmasters under the chairmanship of the Vice-Chancellor:—

"Schools are to be rendered responsible for the grant of a certificate of fitness of each candidate for at least one of the following subjects:—

(*a*) Agriculture and gardening.
(*b*) Carpentry.
(*c*) Smithy.
(*d*) Typewriting.
(*e*) Book-keeping.
(*f*) Shorthand.
(*g*) Spinning and weaving.
(*h*) Tailoring and sewing.
(*i*) Music.
(*j*) Domestic economy.
(*k*) Telegraphy.
(*l*) Motor engineering and drawing."[19]

A criticism.

155. As a comment on these regulations and the arguments of their supporters the following note of inspection on Sunamganj high school is of peculiar interest:—

"I read with interest the committee's resolution that carpentry and weaving should be taught in the school. I do not wish to interfere with the action they have already taken, *viz.*, to appoint a carpentry master on Rs. 25 a month; although I think it is absurd. The experiment is only for three months. At the end of that time the committee will, I have no doubt, agree with me. They have been misled in this matter by an ancient catchword and the lead of the Vice-Chancellor's conference.

"What I should like the Committee to realize is that our high schools are already vocational schools and it is mainly because they prepare pupils for a great market of respectable employment that they are so popular. If the Committee consider that the supply is outrunning the demand and have the courage of their convictions, their proper course would be to limit admissions and to open or move for the opening of new schools to train for such other markets as offer suitable employ-

[19] Bengal, p. 33.

ment in measure sufficient to warrant the establishment of schools to supply them. It is plainly not sensible to adopt the device which has gained their approval, *viz.*, to attempt to train their pupils for two or three vocations at the same time. Is not the attempt to train them for a single vocation hard enough?

"Other points are these:—

(1) That the market for carpenters in Sunamganj is already well enough supplied. This should be evident—if any evidence is required—from the facts (*a*) that the committee are able to attract a skilled workman from the trade—I assume that he is a skilled workman—for Rs. 25 a month, (*b*) that the local carpenters' caste, like the weavers' caste, has taken to cultivation.

(2) That if the *Bhadralog* wish to compete with the *Sutars* and the *Namasudras* in a trade which these castes learn by grace, it is uneconomical, even if it be practicable, as it is not, to lead them into the market by the road of English, Mathematics and Sanskrit.

(3) That individual *Bhadralog* do not in fact wish their sons to be *mistris*. Each thinks that the sons of others, not his own sons, may be diverted from the competition for employment in the clerical and professional market.

(4) That the old national schools taught carpentry but made no carpenters."[20]

Mr. Cunningham concludes:—"What is wanted is not primarily education but employment. There is no royal road to increased opportunities of employment but the increased production of wealth."[21]

Practical subjects in the curriculum.

156. This is not to say that there is no room for improvement in the secondary school course. On the contrary improvements are constantly being introduced. The course has been widened, for example, by the introduction of such practical subjects as hygiene and manual training, considerable progress in which is reported from the United Provinces, the Punjab and Madras, while science is much better taught than formerly. There is a growing tendency to include music in school courses. It is now an optional subject in secondary schools in Bombay, where it is also taught in training institutions and forms part of the primary curriculum. A committee was appointed by the Madras Government in 1920 to draw up a scheme for music teaching in Indian schools. Practical subjects such as wood-work and weaving have been introduced

[20] Assam, p. 50.
[21] Assam, p. 50

into the higher elementary (or middle) classes of some vernacular schools in Madras. These subjects are taught with an educational rather than a vocational aim. But if technical education as such cannot successfully be introduced into the high school, and the Carnegie Foundation has recently issued a damning criticism of the so-called vocational training in the United States of America, still there is no reason why the subjects, which a boy learns at school, should not bear a closer relation to his future life. "The present secondary curriculum is entirely cultural in aim. It does not, except in the case of the best students, succeed in realising that aim. The subjects are studied and, where selection is possible, selected by students with a view to passing examinations and not because they contain matter intrinsically valuable for their future work in life . . . . . Can any alteration in our school courses make our *ex*-students thinking labourers instead of laborious thinkers?"[22] The defect of most experiments in vocational education in Indian high schools is that sufficient account is not taken of the future careers open to and actually adopted by the scholars. Without the advice of the headmaster, which is seldom forthcoming, the school-boy left to himself naturally chooses those subjects which pay best in the final examination. "A combination such as that of agriculture with shorthand, which was actually found in the course of a recent tour, cannot be justified on any ground."[23]

The vernacular medium.

157. Another marked tendency has been towards the substitution of the vernacular for English as the medium of instruction in secondary departments. Some provinces have advanced further in this matter than others. The United Provinces was the first to take the lead. "It is now six years since the English language ceased to be the medium of instruction in the primary and middle classes of English schools. Opponents of the change had prophesied a lowering of the standard of attainment in English, but so far as can be made out, English in schools is somewhat better than it was at the beginning of the quinquennium, and with the intensification of teaching in the periods allotted to the English language, there should be further improvement."[24]

158. The Punjab also adopted the vernacular medium in their middle classes in 1917. It was held that the teaching of English is not advanced, it may even be retarded, by a sloppy use of English as the medium. The substitution of the vernacular should save time which might be spent in a more

[22] Extract from a note by the writer for the Central Advisory Board of Education.
[23] Punjab, p. 72.
[24] United Provs., p. 61.

methodical and practical study of the English language. It is as yet too early to judge the results of the experiment, although it is disquieting to record that at present a deterioration in the knowledge of English is reported. An interesting corollary of the adoption of the vernacular medium has been the setting up of sub-committees by the Punjab Text-book Committee to standardise vernacular substitutes for English technical terms and for the transliteration of geographical names. In Bombay the Education Department allows the use of the vernacular medium throughout the school course in all subjects save English. As a rule the schools adopt the English medium in the higher classes and with a recent decision by the University against the use of the vernacular medium at matriculation this practice is likely to be continued. The Senate of the Calcutta University has adopted a resolution to the effect that "instruction and examination in all subjects (of the high school) other than English shall be conducted in the vernacular."[25]

The position of English.

159. This question is closely dependent upon the position occupied by English in the school course. It is little exaggeration to say that English is the only subject, the intrinsic value of which is recognised by parents and schoolboys. Other subjects may be interesting and must be studied in order to obtain promotion and to pass the final examination, but every high school boy realises that a knowledge of English is essential if he is to get on in the world. This attitude on the part of parents and boys has resulted in assigning to English an excessive importance in the school curriculum. Its importance has not been lessened by the fact that University teachers, while they are content to receive pupils who have been badly grounded in other subjects, complain strongly and not unnaturally when students are admitted to college with an insufficient knowledge of the medium in which their teaching will be conducted. The Rangoon University has instituted a special one year course in English for those matriculates who are otherwise qualified but are weak in this subject.

Simla conference of 1917 on the teaching of English.

160. The position of English as a foreign language and as a medium of instruction was discussed by a representative conference which met in Simla in 1917 under the chairmanship of the then Education Member, Sir Sankaran Nair. The result of this conference was inconclusive. While it was generally conceded that the teaching of school subjects through a medium which was imperfectly understood led to cramming and the memorising of text-books, yet the use of the English medium was defended by some on the ground that it improved the knowledge of English. This is not the place to enter

[25] Bengal, p. 32.

upon a discussion of a subject which has exercised educationists in India since the first introduction of western learning into this country. The difficulty of using any one vernacular as a medium is raised in the report from Bihar and Orissa, where five vernaculars are recognised by the University.

161. The Simla conference further discussed the stage at which instruction in English as a foreign language should be commenced. There were many advocates of the early introduction of English teaching on the ground that only so could a sufficient mastery of the language be obtained at matriculation, and also on the ground that the small child most easily picks up a foreign language. It was argued on the other side that the teaching of English in junior classes must be in the hands of low paid and consequently inefficient teachers, and that no child should start learning a foreign language until he has obtained a stock of ideas in his mother tongue. The advocates of the postponement of English were supported by those who on practical grounds pointed out that its introduction into the primary departments of secondary schools placed a permanent handicap on the country boy who must complete his primary course in the local vernacular village school before he is of sufficient age to migrate to a town for higher or "English" education. Partly on these grounds the commencement of English has been postponed by one year in the Punjab, so that all boys, whether town or country dwellers, now start on a level at the completion of a four-year primary course. The various stages at which it is introduced in different provinces are shown in the diagram at the beginning of this chapter.

English teaching.

162. Of the quality of English teaching there is little fresh to record. While the advantages of the use of the direct method in the hands of a trained and keen teacher are unquestionable, such teachers are in a small minority. In Madras, almost all inspectors report that the teaching in the lower classes does not show the same improvement as the teaching in the higher:—Mr. Yates, for example, says:—"The real problem of English teaching is the renovation of methods and the alteration of aims in the work of the lower classes."[26]

General conditions of teaching.

163. What is true of the teaching of English is also true of the teaching of other subjects. The following remarks from Assam are severe. "Our schools have improved much of late years. But they are not yet good schools, and some of them are very bad indeed. The majority of teachers are inexpert and uninterested, few have any zeal or natural aptitude for teaching; there is little or no discipline of instruc-

[26] Madras, p. 32.

tion—neither boys nor masters habitually prepare for their day's work: the supervision of headmasters and assistant headmasters over the actual work of class teaching is lacking in authority, in persistence and in purpose. Generally speaking, there is a want of life in the school atmosphere."[27] "The results of the average schoolmaster's limitations are patent at all stages of school-life. In the lower classes much excellent work is neutralised by lack of imagination and discrimination. The teacher fails to judge the mental age of his pupils, and to appreciate the characteristics peculiar to the individual and the period of development. Hence develops a form of instruction that converts the vivacious imaginative child into the stolid, 'docile' youth beloved of his master. In the high classes the limitations are revealed in inability to develop the critical faculty requisite to sound judgment . . . . All of which amounts to this, that the standard of work is low, because there is a low average standard of attainment and insufficient pride of profession among school masters."[28]

Qualifications of the teachers.

164. For improvement in the quality of the work we must look to the influence of the training college, the inspector and the headmaster. In no feature of their secondary education systems do the provinces differ more than in their employment of trained teachers in secondary schools. In Government schools in the United Provinces two-thirds of the teachers are trained and the proportion of the trained to the untrained teachers in secondary schools under private management is about 1 to 8.

In Bombay a percentage of 24·1 of the total number of teachers is shown as trained; but every teacher who passes the secondary teachers' certificate examination is returned as trained. Actually only a few of the teachers of English and those almost entirely employed in Government schools have received training of any kind.

In the Punjab although the total number of teachers employed in secondary schools has increased in five years from 5,380 to 9,223 yet the percentage of trained teachers, 70 per cent. has been maintained by an increase from 3,761 to 6,446. The maintenance of the proportion of trained teachers in the Punjab is all the more satisfactory in view of the very large increase in the number of secondary schools in that Province.

In Madras of 7,184 teachers employed in secondary schools no less than 4,954 possess professional certificates, though the number of trained teachers of the collegiate grade is only 18 per cent.

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[27] Assam, pp. 52-53.
[28] United Provs., p. 61.

In the Central Provinces the increase in the percentage of trained teachers in high schools from 26·5 to 67·5 is remarkable. Of 190 teachers in Government schools in this province 167 are graduates.

In the North-West Frontier Province 363 out of 576 teachers are trained and 93 are graduates.

On the other hand in Bihar and Orissa only 146 out of a total of 1,774 teachers of English and Classics are trained though the percentage of trained vernacular teachers in secondary schools is 70.

The case of Bengal is similar. The number of Anglo-vernacular teachers and teachers of classical languages in all secondary schools is 12,906, out of whom only 357 are trained though 3,392 are graduates. The percentage of trained vernacular teachers is, however, about 48 (3,595 out of 7,498).

165. It is a mistake to think that a graduate can teach satisfactorily without training. The elementary teaching of English and mathematics requires particular skill which is not acquired by the study of English literature and higher mathematics in college, while such an important school subject as geography does not form part of any degree course.

Inspection.

166. A radical change in the methods of inspection is needed if the visit of an inspector is to be of educational value to the school. Even if inspectors were fully conversant and in sympathy with modern methods of teaching, they could effect little permanent improvement in the quality of the school work so long as their visits were confined to an inspection of school registers and an *in situ* examination of the scholars' attainments. Something can be done, has been done in Assam, by requiring inspectors to concentrate each year on some particular aspect of the school work, *e.g.*, composition or geography. A plea for a different and more helpful type of inspection is convincingly advanced by Mr. Wyatt of the Central Training College, Lahore, in a report written by him after a recent visit to the United States of America.[21]

The headmaster.

167. More immediate influence on the work of the school should be exercised by the headmaster. It is he who should put life and vigour into the teaching, who should take steps to enlarge the horizon of the boys' minds, who should make provision for their health and recreation. Such a headmaster is the exception not the rule. "Each teacher is prone to frame his own syllabus and to instruct his class quite independently and with too little consideration of what has been done in the class below or will be undertaken in the

[21] Bureau of Education, Occasional Reports No. 11—Rural School Teachers in the United States of America.

class above."[30] Where the headmaster does attempt to reform, his path is beset by disappointment and difficulty. The following is an extract from a petition signed by over a hundred boarders protesting against the order of the headmaster requiring formal preparation of home-work to be done under supervision in the class rooms of the school instead of in the noisy clamour of the dormitories:—"It is difficult for us to keep sitting on the wooden benches . . . it is so intensely hot that it is unbearable for writing works . . . a lot of time is spent in bringing books, etc., from the boarding house . . . our attention in the boarding house is comparatively less distracted . . . in the school rooms it is impossible to have perfect silence . . . however confirming to the students' wills the arrangement in the school may be and, however intelligent the student may be, they would in each case prefer to study at their homes . . . by this method of study . . . we are sure that the results of 1923 would be worse than the year 1922."[31]

The general life of the schools.

168. But "a school is fundamentally two things—a place of authoritative instruction and a community in which may be learnt by way of practice and preparation many of the duties and activities of life."[32] There is unfortunately little to record of the general life of the school outside the class room. Much of this should in a healthy school atmosphere be devoted to recreation—mental and physical. In point of fact the shadow of the examination is rarely lifted. No inconsiderable portion of their spare time is spent by teachers and boys in imparting and receiving private tuition. In some provinces the practice of private tuition is inseparably connected with the low stipend paid to the teacher. Without giving private lessons out of school hours the teacher cannot live. The following quotation from the report of the Calcutta University Commission is fortunately not of general application:—"In the great majority of secondary schools there is little class teaching which deserves praise. The result is that, long as they are, the hours spent in class do not give the boys the systematic instruction which they need; and, for fear of failure at the examinations, recourse is had to private coaching to make up for what the school does badly and might do well."[33]

Reading.

169. I have already referred to the absence of general reading. The difficulty is enhanced in the high school stage by the lack of suitable books to read. There are no story books for children in most vernaculars. To read for pleasure in a

[30] Punjab, p. 70.
[31] Punjab, p. 70.
[32] Calcutta University Commission Report, Vol. I, p. 242.
[33] Calcutta University Commission Report, Vol. I, p. 236.

foreign tongue requires encouragement. There are books in English of sufficient simplicity for the senior students in a high school to read and the Indian schoolboy will, if encouraged, read for pleasure. But that encouragement is lacking. It is hardly to be expected that teachers whose general reading is confined to newspapers can inspire a taste for reading in their pupils and parents are distrustful of any books which are not prescribed in the school course.[34]

Games.

170. Opportunities for school games are limited by the scarcity of play-ground space. Even where play grounds are available the organisation which would make the best use of them in the interests of the largest number of pupils is often lacking. Games are played and played with skill and zest by a limited number of boys. Hockey in particular appeals to the Indian boy; who is often too an excellent gymnast.

Boy scouts.

171. A happy development in recent years has been the spread of the boy scout movement. The training of a boy scout, developing, as it does, initiative and practical ability in the individual, should prove of the greatest value to the Indian schoolboy. A great incentive to the movement was given by the visit to this country of the Chief Scout, Sir Robert Baden-Powell, in the winter of 1920-21. The movement has been allowed to develop on unofficial lines. The Seva Samiti of the United Provinces has now sixty troops with 2,500 boy scouts on its rolls and the Boy Scout Association of Agra and Oudh has a hundred troops with about 2,000 scouts. In the Punjab there are now about 6,000 boy scouts and a large and successful rally took place on the occasion of the visit of His Royal Highness the Prince of Wales to Lahore. In the Central Provinces and Bombay special whole-time commissioners of scouts have been appointed by Government. There are now some 36 boy scout troops in the Central Provinces apart from the School Boy League of Honour. But the most systematic development of the movement is that carried out in the Bombay Presidency. Mr. A. C. Miller of the Indian Educational Service was put on special duty to organise work in the Presidency in 1919. In England with the assistance of Mr. Chapman, originator of the League of Honour, he drew up a scheme which is now in full working. Mr. Miller and six Indian masters had a course of training in England in 1921. A standing training camp for schoolmasters was opened in January 1922 at Lonavla, and by May 177 Scoutmasters had been trained. An appeal for funds by His Excellency Sir George Lloyd resulted in the subscription of over Rs. 90,000. The training camp is attended by would-be scoutmasters from all over India.

[34] *Vide* Bureau of Education, Pamphlet No. 8—Libraries in Indian High Schools, p. 7.

172. All reports unite in speaking of the value of this movement. One inspector writes:—"Scouting seems to be the one outside interest that has really got hold of the boys and I know of cases of boys being saved from utter ruin by finding an outlet in scouting for their superfluous energies. Scout ideals penetrate among those who cannot join owing to the cost of outfit or the prejudice of their relations."[35]

Physical education.

173. In view of the limited amount of exercise taken by the average schoolboy and his devotion to study it is not a matter for surprise that his physique is low. To correct this defect increasing attention has been paid in recent years to physical education. Madras and the Punjab both note improvements in their courses and more general interest in this subject. The Y. M. C. A. have in this matter given invaluable assistance.

Hygiene.

174. Hygiene has been introduced into the curriculum of secondary schools in most provinces. But in this matter precept is better than practice. "Hygiene and temperance have for long figured on the programme of instruction (in vernacular schools in Assam). The instruction is less than half-hearted. The teachers are temperate enough to set an example of temperance, were it required, but in the matter of sanitation their precept suffers from ignorance and incredulity and is contradicted by their practice, which accords with the age-old conventions of the country."[36]

Medical Inspection.

175. The problem of medical inspection is largely one of finance. Experiments have been tried in several provinces. In all Government schools and many aided schools in Bombay a terminal record is maintained of the weight, height, eyesight and chest measurements of pupils and serious defects are brought to the notice of parents. Six medical inspectors were appointed in May 1921, but were unfortunately retrenched a year later owing to financial stringency. The five medical inspectors in the Punjab returned to duty after the war. They have shown keenness and diligence in their work and have collected information and statistics of great value. Their small number permits of only an infrequent and somewhat cursory examination of the scholars in secondary classes and they are entirely unable to follow up inspection by treatment. There is also a lack of co-ordination noted between the medical inspector, the school authority and the parent. In the United Provinces allowances were made to assistant and sub-assistant surgeons for the medical inspection of pupils in recognised English and normal schools. The inspections are

[35] United Provinces, p. 140.
[36] Assam, p. 49.

said to be perfunctory and to lead to nothing either in the way of treatment or of record. In Burma medical inspection is now supplemented in all Government and many aided secondary schools by the regular attendance and service of adequately remunerated school medical officers.

Middle Schools.

176. Middle schools are of two kinds—Middle English and Middle Vernacular. The former are with few exceptions potential high schools. The Middle English School is a transition stage between a primary or middle vernacular school and a high school. It suffers from its position. It follows the same course of study as the middle department of a high school and it aims at preparing its boys for matriculation; but being without the high classes it loses its pupils before they reach that goal." It is often not a very efficient institution. "It is generally reported as affording easy promotion and thus attracting students who have come to a stand-still in better schools. The staff is under-paid and migratory and the institution is uncertain of the continuance of departmental recognition."[37] Middle English Schools.

177. The middle vernacular school is classed in Bombay and Madras as a primary school, apparently on the ground that it uses the vernacular medium and does not as a rule provide teaching in English. In other provinces the vernacular middle school has a character of its own, though its importance varies according to the interest and value attached to it by Government. With the introduction of the vernacular medium in the middle classes of 'English' schools there is little save the absence of English teaching to differentiate the curriculum of the vernacular from that of the Anglo-vernacular middle school. Since it cannot be maintained that secondary education is synonymous with instruction in English, I have classed the vernacular middle school where it undoubtedly belongs under the head of secondary education. The middle vernacular school is cheap because it does not need university men on its staff and yet it is often very efficient. Where it leads to definite avenues of employment in the lower ranks of the Revenue and Education Departments (as patwaries and village teachers) it is popular. This is the case in the Punjab, the United Provinces and the Central Provinces and to some extent in Assam and Bihar and Orissa, all of which provinces report an increase in the number of schools of this class and in the attendance at them. It is not Middle Vernacular Schools.

[37] United Provinces, p. 44.

true of Bengal where admission to a training school for primary teachers is open to candidates possessing only primary qualifications.

Optional English in vernacular schools.

178. In this province in particular, where the number of vernacular middle schools shows a steady decline, and to a lesser degree in other provinces, the chief obstacle to the popularity of the vernacular middle school is the lack of English teaching and the consequent difficulty experienced by its *ex*-pupils in proceeding to a higher education. Arrangements are made in high schools in the United Provinces and the Punjab and have been tried in Bihar and Orissa for a special English class to supply this deficiency in pupils joining after completing the vernacular middle course. But the period of their preparation for the university is necessarily longer than that of boys who have read in English schools. The problem is how to cater for the needs of those who wish to proceed to a high school without destroying the value of the vernacular middle course as a preparation for village life. The solution appears to lie in the addition to these schools of optional English classes. This solution has been tried in the United Provinces and the Punjab. It has met with but indifferent success, chiefly owing to the objection on the part of good English teachers to serve under vernacular headmasters and to live in remote villages where there is no society or opportunity for giving their children a high school education. So the teaching in these optional classes has hitherto been of a poor quality. It is to be hoped that these difficulties will be overcome in time.

Middle school building.

179. The Vernacular Middle School growing as it does out of the village primary school often finds itself handicapped in the matter of accommodation. The Government of the United Provinces drew up a scheme in 1920 for the erection of 127 new buildings for such schools and the extension of 57 old buildings and for the erection of 183 new hostels and the extension of 116. The cost was estimated at nearly twenty-eight lakhs of which Government promised to find twenty-five. Progress was at first retarded by the rise in wages and prices.

Agriculture in Middle schools.

180. A very definite step has been taken in the Punjab towards fitting the vernacular middle school to its environment by the introduction in the middle department of the teaching of practical agriculture. This innovation was recommended by a committee on agricultural teaching which met in 1918. The reasons which led to the recommendation will be discussed and the experiment described in the section on agricultural education. It is already in full working order in twenty schools and has been introduced on a temporary basis in eleven others. At the close of the quinquennium a similar scheme

was adopted in Bombay. If experiments of this kind prove successful and if the difficulties in the way of the introduction of optional English classes are overcome there may emerge a single type of middle school providing a good general and practical education in the vernacular suitable to the needs of the country boy and providing at the same time facilities for the study of English for the few who are in a position to go further with their studies. The evolution of such a type of school would go far to solve two of the most pressing of Indian educational problems, the retention of the educated youth on the land and the equalisation of educational opportunity between the town and country.

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CHAPTER V.

PRIMARY EDUCATION (BOYS).

Statistics.

Schools and Scholars.

Year.	Primary Schools for Boys.	Pupils in primary stage.		
		In Primary Schools for Boys.	In Secondary Schools for Boys.	Total.
1916-17 . .	124,081	5,188,411	504,418	5,692,829
1921-22 . . .	137,437	5,543,437	491,119	6,034,556
Increase or Decrease .	+13,356	+355,026	—13,299	+341,727

Distribution of increase in numbers.

181. The statement shows an increase of over 13,000 in the total number of primary schools for boys, and of nearly 342,000 in the number of pupils in the primary stage. But this increase has been very unevenly distributed. While Madras, Bombay, the United Provinces and the Punjab show a marked advance there has been, for the first time for many years, an actual falling off in attendance in Bengal, Bihar and Orissa, Central Provinces, Assam and Burma.

Causes of decrease. (a) Burma.

182. The remarkable decrease in the number of schools and scholars in Burma (—2,414 and —49,788) was due partly to financial necessity, partly to deliberate concentration with a view to efficiency. The system of primary education in Burma is peculiar in that reliance is placed entirely upon private initiative, the majority of schools in the Province being conducted by Buddhist monks. Out of 4,374 recognised primary schools in the Province no less than 4,360 are aided institutions. Up to the year 1915 new schools were freely registered, that is to say, admitted to the aided list. In 1917 Divisional Boards were made responsible for vernacular education and found themselves saddled with a large number of inefficient schools and discontented school-masters but with no money to support them. The advice of departmental officers with few exceptions was always in favour of reduced registration of schools and payment of better salaries to all competent teachers. "When Divisional Boards adopted the policy of concentration a far larger number of monastic than of lay schools was found to be inefficient and was dis-registered. Consequently the proportion of monastic schools to

others in the Province fell during the quinquennium from 65 per cent. to 43 per cent."[1] It must, however, be remembered that the withdrawal of aid or recognition from these institutions does not mean that they were actually closed. It only implies that the standard required for recognition and aid was raised and it is encouraging to learn that a large number of dis-registered monastic schools can once more usefully participate in the public system of education as soon as funds are available.

(b) Bengal.

183. The decline in Bengal is entirely in the number of pupils attending the primary departments of secondary schools which has fallen by 57,000. This decrease is presumably due to the general causes affecting the attendance in secondary schools of which mention has been made under the head of secondary education. Progress has nevertheless been made with the panchayati union scheme, the object of which is the improvement rather than the expansion of education. 533 board schools have been opened or substituted for aided schools during the quinquennium.

(c) Other provinces.

184. In the other provinces where attendance has fallen epidemic diseases such as plague, influenza, malaria and cholera, adverse economic conditions, periods of scarcity and the general rise in the cost of living are among the chief causes to which the decline is assigned. The non-cooperation movement also affected the attendance in some districts of the Central Provinces and Assam and in the northern division of the Bombay Presidency but here the loss was counterbalanced by an increase in the central and southern divisions.

Causes of increase. (1) Natural expansion. (2) Adoption by local Governments of programmes for rural areas.

185. The increase in numbers in Madras and Bombay is due to natural expansion. In the United Provinces and the Punjab it is the direct result of the adoption by the local Governments of definite programmes for the expansion of primary education in rural areas. The adoption of such programmes was advocated by the Government of India in a circular, which they addressed to local Governments in September 1918. In this letter the Government of India explained that in the new situation caused by the introduction of the constitutional reforms and the consequent complete separation of Imperial and Provincial finance, it would no longer be possible for the Central Government to assist provinces, as it had done in the past, with special grants for the spread of education. The Government of India took the opportunity of emphasising the peculiar importance of primary education at the present time and suggested the preparation of detailed schemes of educational advance. "The

[1] Burma, pp. 4-5.

proposed extensions of the franchise," they said, "will furnish in themselves a special incentive to an early expansion of elementary education."[2]

Schemes of expansion. (a) United Provinces.

186. In the United Provinces the educational scheme evolved from the proposals of the Piggott Committee had not proved entirely successful, and the local Government decided in 1918 to launch a fresh scheme with the object of rapidly increasing the enrolment of primary pupils in the Province. District boards were asked in April 1918 to prepare programmes to cover a period of five years. They were assured of ample financial help for the main project and for such subsidiary projects as the immediate training of all available teachers, the augmentation of salaries and the extension of equal opportunities to communities that were educationally backward. The variety of method evidenced in the proposals put forward and the obvious uncertainty evinced by some boards as to the needs of their districts induced Government to reconsider the duration of the experiment and it was decided that, in the first instance, it should cover a period of three years. The quinquennium shows an increase of 4,956 in the number of schools, and of 138,442 in the number of scholars. The rate of progress, though on the whole satisfactory, has been very uneven. Next to Meerut, for example, which shows an increase of 62 per cent. in the number of scholars, lies the district of Bijnaur which shows a decline. There appear to be no geographical, political or economic reasons for these inequalities. The total increase would have been larger but for a falling off in the enrolment in 33 districts during the last year. This set-back is attributed partly to general causes such as sickness and high prices, and partly to a natural deflation as the enthusiasm of the authorities waned and the inspecting officers found time to check the registers more closely. That such a check is necessary is proved by an experiment carried out by the Inspector of Schools, Fyzabad. The reports on a hundred schools in the Division were checked with the following results:—

The total enrolment claimed was	8,303
The average attendance was	5,516
The day's attendance was	4,903

It is unfortunately only too probable that similar experiments conducted elsewhere in India would lead to similar results.

(b) Punjab.

187. In the Punjab a detailed scheme for the expansion of vernacular education in rural areas was introduced in April 1918. Maps were prepared by the district inspectors under

[2] Govt. of India Circular No. 750-Edn., dated 2nd September 1918.

instructions from the Education Department showing the existing schools and all centres in the Province where an average attendance of 50 pupils might be expected in a primary school, allowing ordinarily a distance of two miles to intervene between any two schools. The maps showed that an additional 4,358 schools would be required. It was expected that the goal would be reached in a period of fifteen years. These maps, after revision by the Education Department, were sent to district boards who were asked to indicate the schools which could be opened with success during the next five years. The local Government then entered into a contract with each district board to share the expenses of completing its five year programme. The method in which the expenses were shared has been described in paragraph 70. In actual practice the district boards have not adhered rigidly to these contracts. Some boards have nearly completed in four years a programme which was intended to occupy fifteen while others are still behindhand with their programme for the first three years. Nevertheless, the result has been a very definite and not too uneven extension of the facilities for primary education in rural areas. Marked progress, for example, has been made in the hitherto backward districts of Rawalpindi and Multan. The quinquennium shows an increase of 700 primary schools and of 25,000 scholars attending them, and of 70,000 boys in the primary stage in all schools.

188. Programmes of expansion were also prepared in the provinces of Bihar and Orissa and Bombay, but their execution was postponed for financial reasons. The Bombay scheme submitted by the Director in 1919 proposed the addition of 1,500 primary schools every year with the object of providing a school in every village of 200 inhabitants. Some mention was made in the last Quinquennial Review of the scheme prepared by the Government of Bihar and Orissa. Its effect would have been to increase the total number of vernacular schools in rural areas from 17,346 to 23,017, and the number of teachers in such schools from 20,879 to 46,181 while the number of trained teachers would have risen from 6,345 to 21,258. The ultimate increase of cost was estimated at Rs. 23½ lakhs per annum. Spread over a period of ten years the annual increase would have been less than 2½ lakhs. The introduction of the scheme has been postponed while the question of the distribution of cost between Government and local bodies is being considered by an educational committee. It is a matter for great regret that this important and carefully prepared scheme has been kept so long in abeyance.

(c) Bombay.

(d) Bihar and Orissa.

189. The foregoing schemes have for their object the expansion of education on a voluntary basis. But there are not

Limits of voluntary

education system.

wanting signs that the time is fast approaching, has in fact been reached in many areas, when reliance on a purely voluntary system will prove ineffectual and uneconomic. It has been noted that the results of the increased expenditure on primary education in the United Provinces have, in many districts, proved disappointing. "Benares at the end of last quinquennium headed the percentages of scholars to population, but expansion in this district under a voluntary system would seem to have reached its limit, since it has a decrease for the last three years."[3] In backward areas such as the North-West Frontier Province the more recently started schools are very poorly attended. The same is true of some districts in the Punjab. On the other hand, in some well schooled areas, such as the Delhi Province, the opening of a new school may simply mean the attraction of a certain number of scholars from an existing institution. Enquiries conducted in Eastern Bengal many years ago, and in more recent years by Mr. E. Biss in Western Bengal, show that in that province the chief need of primary education is concentration with a view to greater efficiency. An increase during the quinquennium of over 3,000 primary schools has been accompanied by an increase of only 5,000 scholars.

Compulsory education. Primary Education Acts.

190. The passage therefore of Primary Education Acts by seven provincial legislatures authorising the introduction of compulsory education by local option has not been inopportune, even though little progress in this direction can be recorded during the quinquennium. Bombay led the way in this matter with a private Bill introduced by the Hon'ble Mr. V. J. Patel which was passed into law in February 1918. The other private Bills which followed are those of Bihar and Orissa introduced by the Hon'ble Mr. S. K. Sahay and passed in February 1919; of Bengal, introduced by the Hon'ble Mr. S. N. Ray and passed in May 1919, and of the United Provinces, introduced by the Hon'ble Rai Anand Sarup Bahadur and passed in June 1919. Of the Government measures, the Punjab Act was passed in April 1919, the Central Provinces Act in May 1919 and the Madras Act in October 1920. The City of Bombay Primary Education Act of 1920 extends generally the provisions of the 1918 Act to the Bombay Corporation enabling it to introduce free and compulsory education ward by ward. Not content with this the Bombay Government set up in July 1921 a committee of two officials and eight non-officials to consider further the question of compulsory education. The committee reported and legislation was undertaken on the basis of its recommendations after the period under review.

[3] United Provs, p. 81.

191. The Bombay and the United Provinces Acts apply only to municipalities, the Bengal Primary Education Act applies, in the first instance, to municipalities, but is capable of extension to rural areas. The other Acts are applicable to all local areas. Boys only are included within the scope of the Punjab, Bihar and Orissa and Bengal Acts while the Central Provinces Act is capable of extension to girls, and the remaining Acts are applicable to both sexes. All the Acts are drafted on very similar lines. If a local body, at a special meeting convened for the purpose, decides by a two-thirds majority in favour of the introduction of compulsion in any part of the area under its control, it may then submit to Government a scheme to give effect to its decision. The scheme must appear in other ways to be practicable and in particular to be within the means of the local body to carry out with reasonable financial assistance from Government. In Bombay the local Government guarantees half the cost of the project; in other provinces the amount of the government grant is left to be determined in each case after consideration of the cost of the scheme and the resources of the local body. The scheme, if approved by Government, can be introduced after due notice has been given. Ordinarily the age limits of compulsion are from six to ten though provision is made for prolonging the period. Provision is made in the Acts for the exemption of particular classes and communities and for special exemptions from attendance in cases of bodily defect, illness and special need or when the only school within walking distance is one to which a parent may object on religious grounds. Walking distance is generally defined as one mile from the child's home. The employment of children, who should be at school, is strictly forbidden and a small fine is imposed for non-compliance with an attendance order. Such in brief are the ordinary provisions of the various provincial Education Acts. Outline of Primary Education Acts.

192. The Bengal Act differs from the other Acts in that it vests powers in the local Government to require municipalities to submit returns showing the total number of children aged six to ten residing in municipal limits, the number actually attending primary schools, and the provision made for elementary education, *i.e.*, the schools in existence, their accommodation, staff and equipment. Municipalities in Bengal have in consequence been asked to prepare a programme for providing education for all children aged six to eleven likely to attend schools voluntarily, and also one for all boys aged six to ten, together with an estimate of the cost of each of these programmes and a statement of the methods by which the cost can be met. Returns were not complete at the close of the quinquennium. The Bengal Act.

The Madras Act.

193. The Madras Act is more comprehensive in character. An account of it has already been given in paragraph 66.

Action by local bodies.

194. It cannot be said that local bodies have shown any alacrity in availing themselves of the opportunity afforded them by these Acts. In Bengal, Madras, the United Provinces and the Central Provinces no local body; in Bombay five municipalities (Bandra, Surat, Bakore, Byadgi and Satara); in the Punjab two municipalities (Multan and Lahore) and in Bihar and Orissa one (Ranchi) had introduced compulsory education before the 1st of April 1922. Little is reported of the success of these eight experiments. The percentage of boys of compulsory age at school has risen with the introduction of compulsion in Multan from 27 to 54 and in Lahore from 50 to 62. Since no provision has been made at either place for the education of the children belonging to the depressed classes and no proceedings have yet been taken against any defaulting parent, it is improbable that a much higher percentage of attendance can be expected in the near future.

195. Compulsion has been introduced under the Act of 1920 in a number of wards in the city of Bombay. There has been a fifty per cent. increase in the number of schools and school children and in the number of trained teachers and a proportional increase in the general and medical inspectorate; a novel feature has been the appointment of lady superintendents. The total expenditure on education in the municipality has increased 350 per cent.

Practical difficulties in the way of introducing compulsion.

196. What causes can be assigned for the Acts remaining so ineffectual? The poverty of local bodies is the cause usually assigned: this is probably the least effective cause. Under all Primary Education Acts, with the exception of that of the Central Provinces where such provision was not needed, local bodies are empowered to raise additional funds in order to meet the cost of introducing compulsion. It is true that if any local body availed itself of this right such a step would add considerably to the unpopularity of the new measure, but there are other more immediate practical difficulties in the way, some of which are peculiar to India. It is not easy, for example, to make a census of the boys, much less of the girls, of compulsory age, when the age of a small child, as in this country, is a matter of some uncertainty. When the census has been made the problem of accommodation, always one of difficulty, is further complicated by the necessity for making separate provision for boys of low castes and in some cases for different communities.

197. In other countries the first step towards compulsion has usually been the enforcement of an obligation on local authorities to provide accommodation for all children of school-going age. In England, for example, the law of 1870 which

made the provision of accommodation obligatory preceded by six years the introduction of universal compulsory education. In India this preliminary stage has for various reasons been omitted.

198. Still, more rapid advance might have been made had it not been for the very natural reluctance of municipal commissioners to introduce a coercive measure. There is a feeling which has found shape in a recent resolution in the Central Provinces and which has resulted in the passing of a new Education Act in Bombay, that the initiative in the matter of compulsion can most easily come from Government. This was recognised by the Government of the United Provinces in 1921. It then asked the municipal boards to report:— Reluctance of local bodies to introduce coercion.

(1) whether they proposed to take any steps to introduce compulsory education;

(2) to what extent they proposed to introduce it;

(3) what financial assistance they required from Government for the purpose.

"The local Government promised, if sufficient funds were available and granted by the Legislative Council, to give assistance to the extent of $\frac{2}{3}$rds of the extra cost involved, including the cost of remitting fees and also to meet the total cost of bringing the minimum pay of municipal teachers up to the minimum rates prescribed for district boards, provided that the total contribution made by Government to any municipality on account of primary education should not exceed 60 per cent. of the total cost of the same."[4] In March 1922 answers were being received from thirty-two municipalities that had expressed their willingness to introduce compulsory education.

199. It would be a mistake, however, to infer that the limits of expansion on a voluntary basis have been reached even in municipal areas. The fact is that a very large percentage of the boys receiving elementary education in towns are not attending primary schools but the preparatory departments of secondary schools. It is only parents of the poorest class who send their boys to municipal primary schools. The needs of this class have been neglected in the past. It is satisfactory to find that they are now receiving more consideration. Mention has already been made of the investigations instituted by the Government of Bengal into the educational situation in *mofussal* municipalities. There are only eight municipal primary schools in the whole of Bengal. At the close of the quinquennium a special grant of three lakhs was made to the Measures undertaken by municipalities to improve voluntary schools.

[4] United Provs., pp. 77-78.

Calcutta Corporation for education and a committee is now sitting to consider the best means of employing it. That it was much needed is evident from the fact that the annual expenditure of the Calcutta Corporation on education amounted to only Rs. 64,000 per annum. The Bombay Corporation on the other hand increased its educational expenditure from about six lakhs to nearly sixteen lakhs during the quinquennium. It now maintains or aids 387 primary schools (257 for boys and 130 for girls).

The Government of Bihar and Orissa in 1917 promised grants on certain conditions to municipalities, in order to enable them to reorganise the facilities for primary education within their areas; no less than seventeen municipalities have availed themselves of this offer.

Expenditure.

Expenditure on Primary Schools for Boys.

Year.	Expenditure from—				Total expenditure.
	Govt. funds.	Board funds.	Fees.	Other sources.	
	Rs.	Rs.	Rs.	Rs.	Rs.
1916-17	56,65,218	1,22,72,286	45,65,223	26,55,062	2,51,57,789
1921-22	2,33,98,645	1,14,68,604	46,31,758	38,48,437	4,33,47,444
Increase or Decrease.	+1,77,33,427	—8,03,682	+66,535	+11,93,375	+1,81,89,655

200. In view of the comparatively small increase in the number of schools and scholars the increase of expenditure on primary education during the quinquennium is remarkable. Of the increase from Government funds thirty lakhs were provided by the Government of India as an Imperial grant in 1918.

Average cost of (1) a primary school; (2) a primary scholar.

201. The average annual expenditure on a primary school has risen from Rs. 203 to Rs. 315 and the cost of educating a pupil in a primary school has risen by 64 per cent.*

At first sight these figures would seem to show that the quality of the education provided in primary schools, so far as quality can be measured by cost, has been immensely

* When consulting supplemental tables 45 and 47, from which these figures have been taken, one must bear in mind that Middle vernacular schools are classed as primary in Bombay which accounts in part for the fact that the cost of a primary school in Bombay, Rs. 1,122, is practically double of that in any other province and nearly ten times the cost of a primary school in Bengal.

improved. But it must be remembered that prices and wages have advanced in every occupation, the teacher who was procurable for Rs. 14 per mensem before the war now requires Rs. 20 per mensem in order to maintain himself and his family. Consequently the cost of educating a boy in a primary school, which had advanced by slow stages from three annas to five annas in forty years, has suddenly during the last five years risen by over three annas.

Improvement in the pay of teachers to meet increased cost of living. (a) In the United Provinces.

202. Nevertheless the rise in cost does undoubtedly represent in most provinces a real improvement in the conditions of the teaching profession. In the United Provinces, for example, of the new provision of forty lakhs for primary education no less than 22 lakhs have been devoted to raising the pay of the teachers. According to the latest scales introduced in April 1921 untrained assistants receive as a minimum Rs. 12 per mensem, trained assistants Rs. 15 to Rs. 20, and headmasters Rs. 20 rising to Rs. 30.

(b) In Madras.

203. In Madras board schools the minimum pay of trained teachers has been raised to Rs. 12 and of untrained teachers to Rs. 10, with a proviso that untrained teachers should not be employed, unless the presidents of district boards and chairmen of municipalities are satisfied after consulting the local inspectors that trained teachers are not available. At the same time capitation grants have been abolished in aided elementary schools and the rates of fee grants have been revised, now ranging from a minimum of Rs. 48 per annum for an untrained teacher with the lowest qualifications to a maximum of Rs. 180 per annum for the most highly qualified teacher.

(c) In Assam.

In Assam the average rate of pay of a primary teacher has been advanced by over 40 per cent., from Rs. 10·6 per mensem to Rs. 14·9. This was effected by means of two special Government grants. The first of Rs. 44,000 enabled local bodies to make a general increase of seven per cent. in the pay of their teachers. At the same time the capitation system by which the pay of teachers was regulated according to the number of pupils in the upper classes of their schools was abolished. It was a relic of the " results grant " system and among other objections to it, it provided an irresistible temptation to many teachers to falsify their registers and thus " imported into the village school system an atmosphere of suspicion and dishonesty."[5] The second grant of two lakhs, voted by the Council in 1921, provided for an increase in the minimum rate of pay of trained teachers from Rs. 8 to Rs. 12 and a general advance of twenty

[5] Assam, p. 59.

(*d*) In Central Provinces.

per cent. In the Central Provinces special Government grants amounting in all to Rs. 6·54 lakhs were devoted to this purpose. "At the close of the quinquennium the minimum salaries of vernacular school teachers were Rs. 20 for trained and Rs. 15 for untrained teachers in village schools with an additional Rs. 3 in dear districts. In town schools the minimum salaries were Rs. 22 for trained and Rs. 17 for untrained teachers with an additional Rs. 3 in dear districts."[6]

(*e*) In Punjab and N.-W. F. P.

In the Punjab the average monthly salary of a qualified primary school teacher has increased from Rs. 15 to Rs. 26 and in the North-West Frontier Province from Rs. 20·3 to Rs. 27·3.

(*f*) In Bihar & Orissa.

In Bihar and Orissa the great majority of the primary schools are aided institutions in which the average fee receipts amount to about Rs. 3 per mensem. In addition to this the teacher receives a grant, the average monthly value of which has risen from Rs. 7·2 to Rs. 8·8. But many teachers receive less; in fact out of 28,000 teachers in aided schools 7,250 do not receive in grants more than Rs. 3 per mensem.

(*g*) In Bengal.

In Bengal various estimates have been made of the cost of increasing the pay of primary school teachers. As the basis of these estimates salaries of Rs. 8, Rs. 16 and even higher rates have been adopted. In these estimates, however, it appears to have been assumed that no differentiation should be made between the pay of trained and untrained teachers, that no teachers are superfluous and that the gradual introduction of improved rates is impracticable. Consequently the estimates appear formidable and no advance is reported during the quinquennium.

(*h*) In Burma.

204. In Burma the position is peculiar owing to the majority of schools being monastic. Hitherto a monk who teaches the departmental curriculum does not receive a teacher's wages but only a results' grant or a small honorarium. "In too many cases," says Sir Mark Hunter, "the acceptance of recognition has meant the withdrawal of local support on the false argument that a monk who receives help (however small) from Government for his school no longer requires that of the charitable."[7] The question of substituting monthly salaries payable either to the monk or to the *kyaung* is now under consideration as also the insistence on a minimum scale of salaries to all lay teachers.

Expenditure on buildings.

205. Some part, though not a large part, of the new expenditure has also been devoted to buildings. Of the need for buildings for primary schools I will write later. Granted the need, it must be recognised that while education is expanding at its present rate it is quite impossible for the building pro-

[6] Central Provs., p. 38.
[7] Burma, p. 37.

gramme to keep pace with the increase in the number of schools. For many years to come most of the primary schools in India must be housed in rented premises. Even in Madras, which probably leads the way in this matter, only 44 per cent. of the schools are housed in buildings of their own; and ground was lost during the quinquennium, an increase of 4,700 in the number of schools being accompanied by an increase of only 1,485 in the number of buildings. In the United Provinces and the Punjab building operations have been conducted on a large scale, no less than Rs. 23,84,943 having been spent in this way in the former province and special grants amounting in all to 11½ lakhs having been made for the same purpose in the Punjab.

District board agency is usually employed for the construction of buildings: but in Bombay some success has attended the experiment of entrusting the construction to the villagers. Forty-three schools were so constructed during the quinquennium at an average cost of Rs. 18 per pupil.

The need for buildings.

206. There exists a certain amount of prejudice against the expenditure of money on primary school buildings. Some theorists go so far as to suggest trees as a suitable substitute for roofs, but the sun, the dust and the rain of India do not lend much encouragement to this view; nor would it commend itself to parents. Others less extreme would use borrowed verandahs and rooms or at the utmost rented premises. But it is a fact well known to every inspecting officer that the possession of a decent building of its own adds much to the popularity of a village school and to the possibilities of efficient teaching. The following remarks are of universal application: "Borrowed buildings are unsatisfactory; they are generally unsuitable for school purposes and they are often used by the owners as well, whereby school work is greatly disturbed. There is a growing unwillingness now-a-days to lend buildings, which is probably due to a general decrease in building operations on account of the increased cost of labour, and, for the same reason, owners expect boards to do repairs."[8]

Type of building.

207. We may then assume that so far as possible every primary school should be provided with a building of its own. Of what precise type the building should be is a more difficult question. There are great difficulties in the way of constructing schools according to type plans. "The chief consideration is as a rule the carry of the local rafter, which is usually from 12 to 14 feet. Thus ideal dimensions have to be sacrificed."[9] Bengal reports that "contractors are often not

[8] United Provs., p. 88.
[9] United Provs., p. 89.

willing to take up the construction of a building for Rs. 1,000 while building materials are dear and instances are not rare in which they have thrown up the work after beginning."[10] *Pucca* buildings mean a larger initial expense. On the other hand less substantial buildings need constant repairs.

Repairs to school buildings.

208. "The unkeep of the boards' buildings is becoming a very serious consideration. The Chairman of the Benares board says: 'In 50 per cent. of the schools I found urgent repairs required and in most cases of an extensive nature such as the replacement of roofs and even walls. The requirements of education in this respect have quite outrun the boards' ability to fulfil and the question can only be solved by special grants from Government or a large increase in general income.'

"This is but one of many such complaints. Labour is scarce and expensive and contractors as a result cannot take up small repairs. Teachers in some parts show unwillingness to supervise for reasons that may be guessed from the request put forward at a union meeting that they should be relieved of 'a work that did not come within their duties' or be allowed the usual commission for its performance."[11]

Fees and free education.

209. The Primary Education Acts, to which reference has been made, generally provide that, subject to the sanction of the local Government, education where compulsory shall be free. During the period under review, primary education was made free in thirteen municipalities in the Bombay Presidency. In Delhi fees have been remitted in the primary classes of municipal board schools and also in some private schools. Vernacular middle education has been made free in the North-West Frontier Province where primary education was already free. In Assam primary education has long been free. In the Punjab children of all Indian soldiers who were in active service during the Great War are now being educated free by means of a series of scholarships sufficient in amount to cover their tuition fees and the cost of school books and, in some cases, to pay the cost of boarding also. In Madras the children and dependents of soldiers who served in the war are admitted to schools under public management at half rates and are also provided with small scholarships to cover the cost of school material.

General conditions. Improvement in pay of primary teachers.

210. I have already mentioned the improvements which have been made in the pay of elementary teachers. Of many provinces it may be said that the "pay now enjoyed by primary teachers raises them beyond the fear of want and there is apparently no difficulty in getting recruits for the profes-

[10] Bengal, p. 39.
[11] United Provinces, pp. 88-89.

sion."[12] The low pay of primary teachers in the past has been a frequent cause of comment, and there are still parts of India where it is far too low to attract competent recruits. But a word of warning is needed for those zealous reformers who would spend all available funds in raising the teachers' pay and hope thereby steadily to improve the quality of primary education. There comes a point at which, if the pay is made sufficiently attractive, the wrong type of young man considers it worth while to turn, if only for a time, to teaching. The best type of village teacher is the intelligent village boy who has worked his way through the primary and middle classes with the definite aim of joining a normal school and becoming a village schoolmaster. As Khan Sahib Maqbul Shah of the Punjab writes "It is only those who are themselves agriculturists born and bred in the villages who can enter into the thoughts and feelings of village people and understand their needs and difficulties. The official class has been recruited chiefly from the commercial classes; and the tyranny and arrogance of official underlings has become a byword. It is therefore a matter of supreme importance that the village schoolmaster at any rate should be a man of the village. Village people are simple, illiterate and ignorant; and the schoolmaster should be their guide, philosopher and friend."[13] There is a real danger, if the pay attached to the post of village teacher is indefinitely increased, of attracting the out-of-work matriculate or 'failed' matriculate, possibly a townsman, certainly one who has been unsuccessful in his life's aim and who enters the blind alley of the village teacher's life as a last resort. Our secondary schools have already only too large a number of discontented failures on their staffs: to introduce this element into primary schools under the mistaken idea that the higher the qualifications the better the teacher would do serious harm to primary education.

Best type of village teacher.

211. At the same time any improvement in the technical qualifications of primary school teachers cannot but be beneficial, and it is satisfactory to find that the percentage of trained teachers is steadily rising. In Madras, for example, it rose during the last five years from 33 to 39, in the United Provinces from 45 to 57 and in the whole of India from 30 to 39. With the greater inducements offered by the better rates of pay and with the extension of facilities for training it is reasonable to hope that this improvement may be maintained.

Improvement in percentage of trained teachers.

212. The quality of the teaching in a primary school depends partly on the capacity of the teacher, partly on the

Importance of the personality of village teacher.

[12] United Provinces, p. 86.
[13] Punjab, p. 95.

conditions under which he has to work and partly on the nature of the task that is assigned to him. Criticisms such as the following of the village teacher show a lack of sympathy with his difficulties: "The Inspector of Schools, Multan Division, quotes a deputy commissioner as having said that 'the average normal pass teacher commands nobody's respect, neither that of parents nor of boys. His chief object is to absent himself from his work as often as he can and be as unpunctual as possible. The new type of teacher has little or no enthusiasm for his work; and his influence for good is negligible.' The Inspector considers this an exaggerated picture, though he feels that it contains an element of truth."[14]

The importance of the personality of the teacher in conducing to the success of the school can hardly be over-estimated. "The teacher is the product of the past. For years he has been despised, first because as a teacher he took pay at all for his services, and again because having taken it he took so little. The first thing he has to achieve under the new conditions is respectability. Wherever there is a teacher who is respected there is a flourishing school. The Chairman of Budaon district says that the personal element in the teaching staff is far and away the most important part in the success or failure of a school. If there were only more teachers filled with enthusiasm the condition of our primary schools would be very different."[15]

Lack of women teachers to train young children.

213. One of the chief defects of the elementary teacher in India is his sex. Universal experience has shown that the best teacher for young children is a woman. It is rare that a man shows any real aptitude for teaching an infant class. No amount of normal school training will make up for this natural deficiency. But if the trained teacher has little success with beginners what sympathetic understanding or expository skill can be expected of the junior untrained assistant or senior pupil to whom the infant class is often entrusted?

The disheartening task of the solitary teacher.

214. The most skilful teacher of either sex would be disheartened if placed in sole charge of a village primary school. It is something to the good that the difficulties with which the village teacher has to contend are now appreciated and that the efforts made to help him are now directed along proper lines. For long the only recognised remedies for the weaknesses of our primary schools were an improvement in the pay of the teachers, an increase in the number of trained teachers and a simplification of the school curriculum. These measures are all helpful but they do not touch the real

[14] Punjab, p. 21.
[15] United Provs., p. 90.

seat of the evil. The inefficiency of the ordinary village school is due primarily to the short duration of school-life and the irregularity of the attendance and secondarily to the excessive number of classes assigned to a single teacher. "Ordinarily the village schoolmaster, ill-found in vitality and learning and depressed by poverty, is in sole charge of a school of five classes or sections which he has to instruct in all the subjects of a varied course. There is no fixed date of admission. Pupils come in month by month according to caprice or the influence of their horoscopes. The lowest class, a class in which numbers are high, is a collection of little groups each at a different stage of advancement. And there are four classes above this.

Irregular attendance and unpunctuality.

215. "Again with an attendance of 70 per cent. on the average, which sinks lower during seasons of flood and fever, the teacher is faced by a different selection of his pupils every day. Unpunctuality adds to his difficulties. In the case of rural habits, the absence of clocks and the defect of discipline, unpunctuality is the rule, the arrival of pupils being spread over a period of an hour to an hour and a half or even two hours."[16]

Short duration of school life.

216. "Only a small percentage of the boys who enter a primary school complete the course."[17] The great majority of pupils in primary schools do not remain long enough at school to gain any permanent advantage from their education and a considerable number of those who complete their course are found after a few years to be unable to read or write. Again, the little benefit which might be obtained from instruction in the infant classes is lost in many cases by irregular attendance. One chairman complains[18] that he has found three teachers wasting their time with 20 boys out of an enrolment of 90, and a false registration of 30. The question is of such fundamental importance that in 1918 the Government of India commended its consideration to local Governments suggesting certain remedies to reduce the evil, such as the introduction of more efficient teachers, a reduction in the numerical strength of the primary school classes in order to enable the teacher to give more individual attention to his pupils and changes in the curriculum designed to induce parents to leave their children longer at school. Of the short duration of school life much was written in the last Quinquennial Review and subsequent reports throw no further light on the question. Of the lapse into illiteracy I have written in paragraph 34. The only effective method of checking irregular attendance and wastage is compulsory education, which is no longer a wholly impossible ideal.

[16] Assam, p. 61.
[17] Burma, p. 83.
[18] United Provinces, p. 83.

Remedies attempted pending compulsion. (a) Reduction in number of classes.

217. Compulsion would also solve the teacher-class question. Some relief can be afforded by a reduction in the number of classes in a primary school. Such relief has been afforded in the Punjab, where the number of classes has been reduced from five to four, so that more attention can now be devoted by the teacher to each class. [Incidentally it is interesting to note that Germany has now adopted a uniform four-year elementary school, the 'Grundschule', as the basis of her educational system.] This process of reduction, however, cannot be carried too far. The feeder preparatory schools, founded under the Piggott system in the United Provinces, did not function as such and it has been found necessary to revert to full primary schools.

(b) Provision of Assistant teachers.

218. The average attendance at a primary school in India (see supplemental table 40) is 40, but this average has been raised by the inclusion of vernacular middle schools in Bombay, and the daily attendance at the great majority of village schools is considerably less. It is impossible, however desirable, to appoint a second teacher in every small school, though this is laid down as the ideal to aim at in the United Provinces and Bihar and Orissa. Ordinarily a second teacher is employed when the enrolment exceeds thirty. Since it is unquestionable that a school of fifty children with two teachers is more than twice as efficient as a school of twenty-five with one teacher, the problem is to raise the enrolment of every primary school till it is entitled to the services of, at least, two teachers. "It is difficult for a teacher working in isolation to resist the insidious temptations of apathy and slackness. A school without a headmaster must lack orderliness and energy."[19] Under a voluntary system an increased enrolment can only be obtained by patient endeavour on the part of teachers and inspecting officers. The danger of expecting too rapid progress is illustrated by the figures of enrolment in the Fyzabad primary school, which have been quoted. For the teacher of the aided school there is no pecuniary inducement to secure the help of an assistant. Indeed, one inspector in Bihar and Orissa mentions that he has often seen "40 or 50 boys attending the school, but only 30 actually on the roll, the object being to prevent the appointment of a second teacher and so secure all the fees for one man."[20]

Cost to parent of primary education.

219. It is often asked why compulsion or earnest endeavour on the part of the teacher should be needed to induce village parents to send their children to school. The cost is apparently negligible since the average annual fee for each pupil is only 13 annas 7 pies and the advantage to a boy to be able to read and write should be obvious. But, in the first place,

[19] Punjab, p. 95.
[20] Bihar and Orissa, p. 75.

the cost is not quite so small as would appear from the fee rates; school books and material must be bought. In pre-war days I worked out the cost per head of providing free books, slates, etc., to all the boys in a four class primary school; the result of the calculation was about Rs. 3 a year for each pupil, and in this case the teacher would have been responsible for the custody and preservation of the material. The life of a school book in the hands of a small village boy is brief. Even in Assam where primary education is free "estimates of the whole cost, including clothing and umbrellas, rise from Rs. 25 to Rs. 50, and even if these latter estimates are excessive yet being halved they still offer a formidable barrier."[21]

Stagnation in lower classes.

220. Again supposing that times are good and the cost is no deterrent it is not safe to say either that, if a boy is sent to school, he will, within a reasonable time, learn to read and write, or that, if he did so, the advantage would be obvious to his parents.

The figures in General Table X show that of a total attendance at schools and colleges in India of 7,594,000 no less than 4,898,000 are reading in the infant and first classes (which in some provinces are synonymous). The foundations appear excessive for the superstructure, but they are laid in part on a shifting sand of casual attendance, in part on a stagnant morass of neglected ignorance. Even after allowance is made for negligent or improper registration, for the use of the infant classes as a crèche to keep small children out of mischief and for natural wastage owing to premature withdrawals, there is no doubt that the smaller children receive but indifferent attention, and that many *bonâ fide* and willing scholars spend an unnecessarily long time in acquiring the rudiments. I once found a small schoolboy of average intelligence wearing on his single garment a commemorative medal, which he had received in school two years before; he had not yet mastered the alphabet. The subordinate inspecting staff of the Education Department wage a constant war on what they term 'undue stagnation', but in the ordinary conditions of a single teacher primary school stagnation is, to a large extent, inevitable. [It is estimated that in Bombay about 38 per cent. of the pupils in the infant class stagnate there and that of the pupils admitted to that class only some 18 per cent. actually pass the 4th standard.]

Casual attendance due to climate and epidemics and

221. Inevitable also under a voluntary system is casual attendance. "The excuses presented by the schoolmaster for low attendance are valid enough, in moderation. In the rainy

[21] Assam, p. 64.

numerous festivals.

season communication is interrupted and the actual days of downpour may be counted as '*dies non.*' During the month that follows malaria is prevalent and throughout the cold weather it is sporadic and spasmodic. Influenza and plague may be epidemic in any year and usually cease about the time, in the early hot season, when cholera is due. Then there are the days of preparation for fast and feast and the days of recovery from them, the harvests long drawn out and the marriage festivals in carefully planned succession. A skilful scholar could, with the help of a complacent teacher, almost fill out his year. Yet the cogency of these excuses is invalidated by actual attendance in the last year of a middle school course, when urgent private affairs are found to give way to the demands of the vernacular final examination."[22]

Cause of small attendance of sons of agriculturists.

222. It is often stated that the agriculturist needs the help of his boys in farm work, and cannot for this reason afford to send them to school. This can hardly be true of children under eight years of age whose presence at home must be less of a help than a hindrance. It is also true to a very limited extent of older boys of primary school age. During the year 1920-21 enquiries were made in 49 villages of Bihar and Orissa containing 9,491 boys between the ages of 5 and 16. Of these boys 2,467 were at school and 7,024 were not. Of the boys not at school, 46·03 per cent. were stated to be kept away by poverty, 33·78 per cent. because they were required to earn a living, 17·58 per cent. owing to unwillingness or indifference on the part of their parents, and 2·61 per cent. owing to the absence of further educational facilities locally. The percentage required to earn a living would undoubtedly have been very much lower had the maximum age been reduced to eleven, the maximum fixed under compulsory education acts.

Experiments to attract the agriculturists. (*a*) Half-time schools.

223. To attract this class of absentee two experiments have been made, the holding of half-time schools and the granting of holidays at harvest times and at other seasons when agricultural work is heavy. The half-time system met with a certain success for a time in the Allahabad district, but this success is now attributed to the personal influence of its originator. With his transfer to another station it has fallen into desuetude. Attempts elsewhere have met with even less success. The Chairman of the District Board, Pilibhit, says "Parents expressed their opinion of the value of the half-time system by simply withdrawing their boys."[23] Belief in this experiment dies hard, and it is still being tried in the United Provinces and the Central Provinces. The Inspector

[22] United Provs., pp. 83-84.
[23] United Provs., p. 93.

of Schools, Berar, reports that " the scheme however is unpopular with the teachers, the parents and the children, and it is yet too early to gauge the result of the experiment as a means of economising staffs and funds or of increasing the number of pupils."[24]

(b) Harvest holidays.

224. Of the harvest holidays the Inspector, Fyzabad, reports " Harvest holidays have been given in Bahraich and Sultanpur up to the present year; in other districts they have been discontinued because of their unpopularity. The Deputy Inspector of Fyzabad says that the boys and teachers do not work so much as is supposed in the fields. In Sultanpur the return to the June holidays is solicited. I imagine that the presence of the children at marriage ceremonies is more imperative than their presence in the harvest fields."[25]

(c) The ruralisation of the village school course.

225. Another method advocated for removing the agriculturist's prejudice against school is the ruralisation of the school curriculum. For example, attempts have been made to awaken interest in the school garden. In Bombay a course in nature study and school gardening is now followed in schools which have the necessary facilities. In the Central Provinces an officer of the Agricultural Department was lent to the Education Department for the special purpose of advising it on the adaptation of village schools to rural needs. " The immediate aim was to connect the school gardens more closely with the instruction given in the village schools, and to make work in these gardens a means of keeping pupils in touch with agricultural surroundings."[26] Attempts have also been made to give definite instruction in practical agriculture in village schools in the Central Provinces. School gardens have received considerable attention in the United Provinces. Occasional success is reported, but " there is little doubt that the boards generally speaking are indifferent to school gardening. Teachers as a class are not interested in the growing of flowers, vegetable or crops, and have little or no knowledge of how to use the school garden for lessons in nature study. They are always ready to justify their indifference by a variety of excuses such as lack of water, insecurity of the plots from raids by goats, cattle and other animals, and so on."[27] In Madras a committee appointed by the Government to deal with rural education reported in 1919 and recommended the inclusion of compulsory nature study in the scheme of studies for the elementary school. Special text books on the subject were prepared. The inclusion of practical agricultural teaching in primary schools was definitely rejected by

[24] Central Provs., p. 34.
[25] United Provs., p. 95.
[26] Central Provs., p. 36.
[27] United Provinces, p. 91.

the Punjab Committee on agricultural education in the light of experience both in this and other countries.

What the agriculturist understands by education.

226. There is much to be said on educational grounds for the adaptation of school text books to the environment. "At present the boy in Bombay City and the boy who had never been outside his native village read the same books, work the same examples in Arithmetic and so on."[28] But it is a mistake to suppose that any steps to ruralise the curriculum will appeal to the rural parent. I have when inspecting received complaints from villagers that the school readers dealt with the doings of dogs and crows and such common things instead of containing instruction in religion and morals. The introduction of practical subjects in the primary course, even if the teachers had the ability or the leisure to teach them, would certainly not meet with the parents' approval. The following remarks from a report on village education in India made by a commission appointed by the National Missionary Council are very pertinent:—"The child is taken away after a year or two, the ostensible reason is that he must bring grist to the mill, but if a parent were convinced that education was something worth having he would, in many cases, find means of overcoming the economic difficulties. Regarding this, however, there is a good deal of misunderstanding. It is often assumed that the education given in a village school is despised because it is not practical enough. In many cases, however, the parent's objection is just the opposite. He has no desire to have his son taught agriculture, partly because he thinks he knows far more about that than the teacher, but still more because his ambition is that his boy should become a teacher or clerk." "The solution which is so frequently put forward of popularising schools by adapting rural education to rural needs has little or no meaning in the absence of an agreement as to rural needs between the rustic and the reformer. The reformer has in mind the introduction of utilitarian studies such as agriculture into the village school course. The rustic sends his child to school to learn to read and write. He has no doubt of the fact that the village *guru* knows less of agriculture than he does himself and that what the boy needs in the matter of agricultural knowledge he can learn by doing in the fields. It is a view altogether sensible; and some sympathy may be felt for the parents in one backward area who went so far as to beat the *guru* for setting their boys to work in the school garden."[29]

The attraction of English in Primary Schools.

227. A subject which is far more likely to attract pupils to primary schools is English. The teaching of English in primary classes is permitted in Madras, Bengal, Bihar and

[28] Bombay report.
[29] Assam, pp. 64-65.

Orissa, and in the higher or secondary classes in Bombay. The English teaching in most primary schools cannot be of a high quality. The stage at which it should be introduced is discussed in paragraphs 161 and 491. In Burma, where the teaching of English has been a special feature of primary education, English reading and writing have been excluded from the two lower classes on purely educational grounds (*i.e.*, desirability of systematic oral work in the earlier stages of learning a foreign language; objections to learning two scripts simultaneously; the desirability of learning to read and write the vernacular as thoroughly and as early as possible; etc.).

Conclusion.

228. The problem of primary education in urban areas is largely social and economic. The great majority of town boys of the better class already attend school. If boys of lower classes and castes are to be encouraged to come to school large sums must be spent on school accommodation, and this expenditure must be met by the well-to-do or better class citizens. If they are prepared to meet it, there is room still for great educational expansion in towns even without resort to compulsion.

229. It is otherwise in rural areas to which ninety per cent. of the population belong. There is little to be said for opening schools to which parents will not send their children. The only cure for the indifference of agriculturists to education is, as pointed out by Mr. Anderson, vigorous propaganda accompanied by marked improvement in the efficiency of the village school. In any case, a voluntary system must be extravagant and ineffective. Mr. Anderson, while admitting that the poverty of many of the parents, the impossibility of employing women as teachers in boys' schools and caste differences present great obstacles, yet makes a vigorous plea for the gradual introduction of compulsory education in rural areas. I close with two words of encouragement from Bengal and Assam the more welcome in that these provinces would seem to have small cause for optimism. "At present it is probable that with all the attendant evils, which have been pointed out *ad nauseam* for the last twenty years, the system, even with its misdirected effort and its overlapping and rivalries of neighbouring schools, does give to a certain proportion of the population a certain degree of literacy at an extraordinarily cheap rate. The total cost of educating a boy for five years in a primary school is Rs. 20. What is given in return may not be the best of its kind, but considering its price, the marvel is that it should be so good."[30] "There is no school, however stubborn in its illiteracy, which does not

[30] Bengal, p. 40.

convey some message of hope. The most backward are the outposts of progress."[31]

Adult Education.

230. The question of adult education began to engage public attention towards the close of the period under review, interest in it being stimulated by discussions on the franchise. It is probable that the present quinquennium will have a considerable advance to record. During the last this much can be said that in some provinces the question received serious consideration and that a few organised experiments were made.

United Provinces.

231. In the United Provinces the local Government in 1921 offered a subsidy to six municipalities for the development of a system of night schools for adults. Bareilly now reports reasonable success, twelve schools with 475 pupils, and Lucknow has had four schools. Benares and Agra confessed to failure. Except in the Bareilly district night schools have not succeeded in rural areas in the United Provinces.

Punjab.

232. In the Punjab, on the other hand, over a hundred night schools have been opened mostly in rural areas and mostly under the auspices of the Co-operative Credit Societies. "One of these societies has gone so far as to resolve that any member who remains illiterate at the end of two years will be turned out of the society. Another society has made education compulsory for the sons of its members."[32] In all there are 1,783 students attending these schools. The average attendance is high and progress is said to be good. The age of members is usually from 18 to 60 years. In more than one school father and son read together. Reading and writing are taught. The teacher is sometimes the local school teacher, sometimes a literate cultivator. A small honorarium is contributed by the local Credit Society or from tuition fees. In some cases grants have been sanctioned by district boards. There would be more schools were good teachers more readily available. The need for suitable primers for adults is noted.

Bombay.

233. Bombay reports a similar development. There are 37 schools maintained from funds placed by the late Sir V. D. Thackersey, at the disposal of the Central Co-operative Institute, Bombay. The schools are controlled by the Education Department and have special inspectors to look after them. These Bombay night schools are circulating schools stationed at each centre for two years. Each class is open for two hours daily, except on Sundays and public holidays. Generally the local board buildings are used and the local board teacher.

[31] Assam, p. 64.
[32] Punjab, p. 97.

To claim a school an attendance of at least 20 pupils between the ages of 16 and 40 must be guaranteed, who are members of a co-operative society or children of such members. The course includes grounding in the three R's and elementary knowledge of co-operative accountancy. There are examinations at the end of each year and rewards are given to successful candidates. It is hoped to develop village libraries in connection with these schools.

234. In the Central Provinces the number of pupils in night schools rose from 500 to 1,400. 800 of these attend seven schools financed by the Manager of the Empress Mills and run by the Y. M. C. A. for the benefit of the employees in the Mills and members of the depressed classes. Central Provinces.

235. In Bengal there are 1,500 schools classed as night schools but they are ordinary primary schools held outside the usual school hours. There are in addition 100 continuation schools with three thousand pupils which are intended to carry on the education of those who have passed the primary standard. There are also forty schools for adults run by co-operative societies. Bengal.

236. The number of night schools in the Madras Presidency rose from 707 to 2,456, with a corresponding increase in enrolment from 17,606 to 58,233. "Steps were taken to prevent the recognition of schools as night schools which contained only children and which might well be considered as ordinary elementary schools. Work in night schools continues to be largely experimental, and amongst the problems engaging the attention of the department are the effective supervision of managements, the framing of suitable curricula, the question of seasonal schools, for example for agricultural labourers, and the prevention of over-lapping with day elementary schools."[33] Madras.

[33] Madras, p. 35.

CHAPTER VI.

EDUCATION OF INDIAN GIRLS AND WOMEN.

Statistics.

Institutions for females.

—	Year.	Arts Colleges.	High Schools.	Middle Schools.	Primary Schools.	Special Schools and Colleges.	TOTAL.
Institutions for Girls.	1916-17	8	81	446	18,077	512	19,124
	1921-22	12	120	548	22,579	258	23,517
	Increase or decrease	+4	+39	+102	+4,502	—254	+4,393
Female Scholars in Girls' and Boys' Schools.	1916-17	493	15,571	69,837	1,033,574	16,535	1,136,010
	1921-22	881	26,239	85,247	1,195,967	10,880	1,319,214
	Increase or decrease	+388	+10,668	+15,410	+162,393	—5,655	+183,204

N.B.—The statistics of European schools and scholars are *not* included in this table.

237. Although there has been an increase of nearly two hundred thousand in the number of girls attending school, yet the total attendance of one million three hundred thousand is a mere fraction of the millions of women in India who remain illiterate. A circular addressed by the Government of India to local Governments in 1919 pointed out that only 0·9 of the Hindu female population and 1·1 of the Muhammadan was under instruction, while among Europeans and Anglo-Indians, Indian Christians and Parsis the percentages were 23, 8·3 and 14·6, respectively. The circular reviewed the situation and suggested lines of development.

Obstacles to women's education.

238. It is difficult to exaggerate the obstacles to the progress of women's education in India. All the influences, which operate against the spread of education amongst boys—the conservatism and prejudice of the people, the remoteness of the advantages accruing from education, the indifferent quality of the education offered and its cost—all gain added strength in opposing the education of girls.[1]

Conservatism and prejudice are reinforced by the *purdah* system and the custom of early marriage which, even when a parent is so far emancipated as to send his daughter to school, result in her withdrawal before she reaches the stage of literacy. If the advantages to his son of a school education

[1] Assam, p. 83.

FIG. 6.

DIRECT E

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" _____

Schools _____

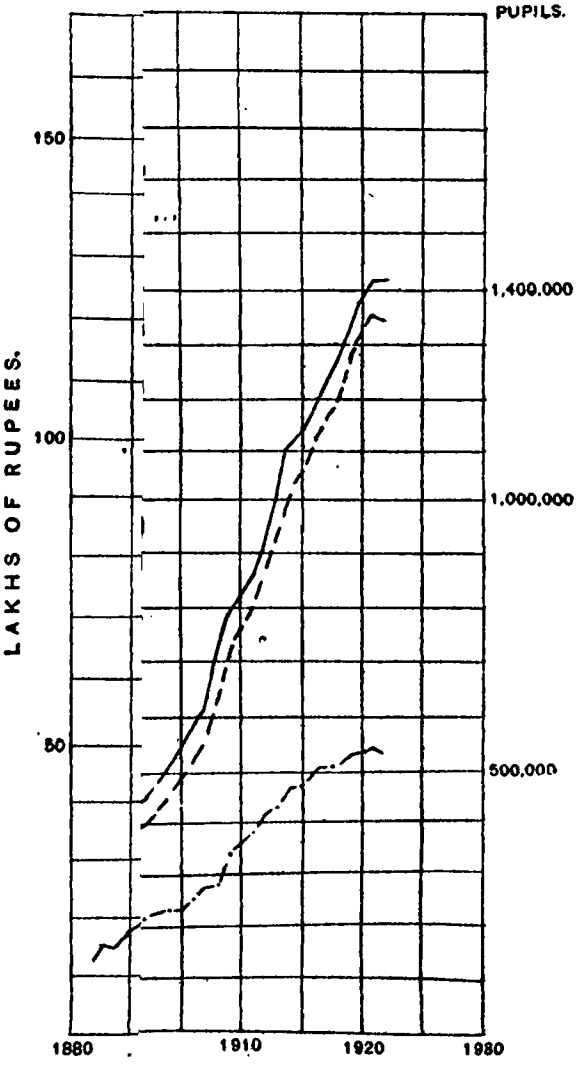

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Fig. 5.

DIRECT EXPENDITURE ON INSTITUTIONS FOR GIRLS.

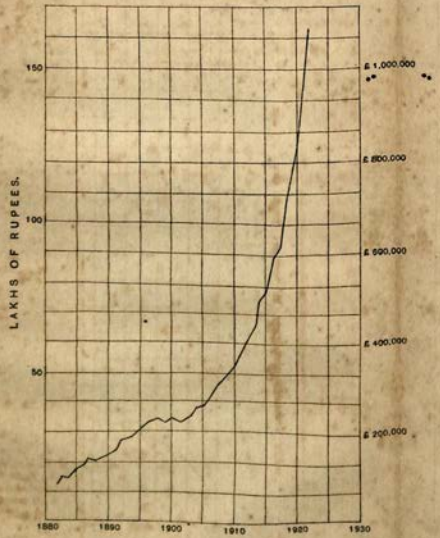
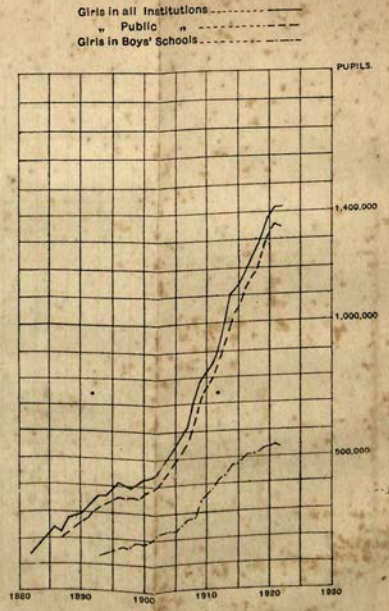


Fig. 6.



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are not obvious to the Indian agriculturist, still less reason is there in his eyes for the education of his daughter. The village primary school for boys may have its weak points but it is a model of efficiency when compared with the average primary school for girls. Finally, the cost of providing girls' schools adds one more to the financial problems of local governments and local bodies, who already find their resources inadequate to meet the claims of the other sex for education.

239. Of these adverse factors much has been written in the past and it would be a disheartening task to elaborate their importance. It will be more profitable to turn to the other side of the picture and to describe, in this review, the various measures that have been taken in recent years to overcome or weaken their force.

Efforts to overcome prejudice against (*a*) schools; Zenana Education.

240. An attempt to evade the prejudice of the Indian parent against sending his girl to school by bringing the school to the home may be dismissed in a few words. The *zenana* system has been most widely tried in Bengal and Assam. But "there seems to be a consensus of opinion that the results of *zenana* education are not proportionate to the expenditure of public funds. The system makes little progress, very largely because the house-to-house visits, favoured by the women themselves and their relatives, are not conducive to economy of effort. Again, the standard reached by the pupils is very low which is natural when it is realised that few of the teachers can teach beyond the lower primary standard."[2] It has met with some small success in Sylhet but it "deserves little or no consideration as a claimant upon public funds. It may be left to private agencies to develop the experiment or to leave it alone."[3]

(*b*) Co-education; girls' schools.

241. Before attempting to combat the more indefinite opposition of conservatism and prejudice it is necessary to remove any genuine causes of mistrust. Except in some of the larger centres in Bombay and in a few special areas, such as the hill districts of Assam, there is a not unreasonable dislike for co-education. In the Punjab it can hardly be said to have obtained a foot-hold. In the United Provinces girls over ten are not admitted to boys' schools. In Bengal there is still a system by which girls "in the remoter districts unprovided with a girls' school come to the boys' school, or the *Pandit* of the boys' school holds, or is supposed to hold, separate classes before or after ordinary school hours, receiving in either case extra remuneration."[4] Even in Burma, where co-education has been the traditional system in non-monastic schools and where monastic schools have recently been

[2] Bengal, p. 66.
[3] Assam, p. 87.
[4] Bengal, p. 65.

receiving an increasing number of girl pupils, there is "a natural and growing distaste of co-education."[5] Hitherto Burmese opinion approved of it only because girls have left school when very young and it has consequently proved an obstacle to an adequate school life for girls.

Obviously, the first step to overcome opposition is to increase the number of girls' schools and so do away with the need for co-education. The figures given at the head of this chapter show that considerable progress has been made in this direction.

(c) The path to school; conveyances.

242. But the provision of the school is not in itself sufficient; there is in towns the difficult question of transit from home to school. Special attendants are required to convoy the girls to school and home again after the day's work. In connection with the larger schools conveyances are maintained to transport the girls backwards and forwards. In Bihar and Orissa "parents throughout the province and especially in towns do not care to let their children walk to school and usually expect the necessary conveyances to be provided free of charge, or at any rate at a very small cost, by the school authorities. Inspectresses complain that many parents object to paying even a small conveyance fee of Re. 1 and that those possessing conveyances of their own make use of the school bus, for which they have only a small fee to pay. The co-operation of the richer parents in this matter would be a great help; the number of conveyances which a school can provide is not unlimited and at the Bankipore girls' school, for instance, want of room in the conveyances is keeping down the roll number; if parents, who can afford to do so, would make their own arrangements many poorer children would be able to come to school."[6]

(d) Girls' education in general; propaganda.

243. The removal of these obstacles to attendance will have little effect so long as, in the words of one deputy inspector, "female education is carried on in response to a demand that does not exist."[7] Such a demand can only be created by vigorous propaganda. But the agencies for propaganda are few and their operation limited. Encouragement by a local official may have a pronounced effect on the attendance of girls in a particular area, but only too often with the transfer of the official this effect wears off. The male inspecting staff of the Education Department is very fully occupied with its own duties in connection with boys' schools. The female inspecting staff is quite inadequate for the ordinary duties of inspection. Of this I have written elsewhere (paragraph 64). Small though their number is the influence of inspectresses

[5] Burma, p. 59.
[6] Bihar and Orissa, p. 105.
[7] Indian Education in 1919-20, p. 17.

and assistant inspectresses, not only in attracting girls to existing schools but also in creating a demand for new schools, is a most important factor in the spread of education amongst women. In this work they have received particular assistance from missionary bodies, both European (including American) and Indian. For example, in recent years, valuable work has been done in some provinces by associations such as the Seva Sadan Society, the Arya Samaj, the Dev Samaj and the Khalsa Diwan. The following statement shows the work of English and American Missions for women.

Christian Missions for women.

Institutions for females maintained by Missions, 1921-22.

	Arts Colleges.	Secondary Schools.	Primary Schools.	Special Schools and Colleges.	TOTAL.
Institutions . . .	10	303	1,200	131	1,644
Scholars	660	40,724	85,194	4,809	1,31,387

N.B.—The statistics of certain mission institutions for European girls are included in this table.

244. As a result largely of the efforts of these various agencies it is reported that "Indian public opinion is slowly changing from its former attitude of positive dislike to the education of women and is progressing through apathy to cordial co-operation."[8] "Even in villages and outlying districts the former indifference or even antagonistic attitude towards the improvement of the intelligence and status of women is passing away."[9] "Even social barriers of age and early marriage are being relaxed to enable girls to receive primary and secondary education."[10]

Education for marriage.

245. There is the greater cause for gratification in this development because the utilitarian motive, which admittedly influences most parents to send their boys to school, has very small force in supporting education for girls. In the higher walks of life education has some value in the marriage market. "Educated men desire educated wives for their sons and presumably educate their daughters with the same object in view, but they generally withdraw them from school on any manifestation of a desire to adopt a profession or to push education to any length which might interfere with or delay marriage."[11] "Even those parents who are not averse to their daughters

[8] Bengal, p. 60.
[9] Punjab, p. 128.
[10] Bombay report.
[11] Central Provinces, p. 61.

being literate consider that the primary course is sufficient and that after its completion girls are too old to be away from their homes."[12] "The demand for female education among higher caste Hindus and even among Muhammadans has been on the increase from year to year. People do not educate their daughters in order to qualify them for employment. They send their girls to school in order to enable themselves to marry them better and occasionally on easier terms. But as soon as a suitable bridegroom is available the girl is at once placed in the seclusion of the *purdah*."[13] In Bombay it is stated that "with the progress of education the limit of age for marriage has increased, specially among girls belonging to the high caste Hindus."[14]

Education for employment.

246. The advantages of education as an aid to successful marriage cannot influence the parents of the poorer classes. They are on the other hand less averse to the employment of their daughters in independent occupations. The number of girls being trained as teachers for primary schools has increased from 2,757 to 4,391. "The girls themselves are eager to go to school and anxious to become teachers."[15] There is also a small number of successful industrial schools for girls. In Madras and the Punjab, for example, there are schools in which girls are taught embroidery and lace making, while spinning has recently come into favour. In Bombay there are mission institutes at Karachi and Sukkur doing good work, and five aided industrial institutes run by philanthropic Indian gentlemen for widows and deserted wives. The women receive stipends of Rs. 8 or Rs. 10 per mensem; the schools aim at meeting much of their expenses by the sale of their work. There have also been instituted in some provinces small scholarships for the daughters of *dais* (mid-wives) in order to attract them to school in the hope that when they are old enough to enter their hereditary profession they may also be sufficiently educated and intelligent to receive some professional instruction.

247. But the number of girls who enter school with a view to such vocational and technical training is very small. The majority of the girls who attend school are probably sent in the first instance, just as many small boys are sent, in order to keep them out of mischief at home. This presumption is supported by the statistics given in General tables V and V-A which show that no less than 88 per cent. of the girls at school are in the lower primary stage, and of these 40 per cent. or half a million (out of a total attendance of a million and a half) are returned as 'not reading printed books.'

[12] United Provinces, p. 120.
[13] Assam, p. 87.
[14] Bombay report.
[15] Punjab, p. 129.

248. The number of parents who are ready to see the cultural advantages of a general education is undoubtedly on the increase, but as in the case of boys' education the majority still question the value of the subjects taught. If, they argue, the destiny of every girl in this country is marriage, then the function of the school should be to prepare girls directly for domestic duties. Make the education in girls' schools of practical value and more girls would come to school and more would stay longer at school. One local body in Assam went so far as to suggest that schools should not bother about literacy but should confine themselves to instruction in domestic economy. The school of thought typified by this local board exercises a wide influence. It is unnecessary to point out its limitations. Even if the disadvantages of illiterate parenthood, which it ignores, are left out of account, the practical difficulties in the way of introducing a 'domestic' curriculum in girls' primary schools are insurmountable. The ordinary country parent has little use for lessons in agriculture given to boys by the village school master; what value would he or she attach to lessons in cookery and the care of the home given by a girl fresh from a normal school or by the village pandit? The introduction of such a curriculum would certainly not attract pupils to school. "Girls have so few years of school, public opinion is so uncertain as to what their education should include, and teachers with a wide range of capacity are so few that it is for consideration whether schools should not within generous limits be permitted to decide their own curricula with reference to local opinion and the capacity of the teachers available, subject always to the one condition that the chief subject shall be the girl's own language, literature and traditions."[16] An example of the influence of local opinion is the importance attached in the Punjab to religious instruction: local bodies have been encouraged to start denominational schools for girls. One practical subject—needlework—is taught in nearly all girls' schools. In Bengal where many of the schools are in charge of men a system of peripatetic instructors has been introduced which is working very well.

Education for domestic duties.

Primary school curricula.

249. It is when the middle stage is reached and the employment of specialist teachers is possible that the question of devising a suitable curriculum for girls' schools assumes practical importance. It has given rise to a great deal of controversy. "Opinions invited by a notification in the Assam Gazette elicited a list of no fewer than forty-two subjects which ought to be included in the curriculum, including botany, eugenics, cooking, physiology, nursing, midwifery, *mushtiyoga* (the science of simples), music, scientific bee-keep-

Middle school curricula.

[16] Bengal, p. 65.

ing and the rearing of silk-worms."[17] In the United Provinces the department framed in 1918-19 an alternative curriculum for middle schools, designed to meet the needs of girls who do not wish to proceed to the high stage. "It is found more suitable than the old curriculum and the emphasis laid on domestic science finds favour with girls and parents."[18] In high schools "the curriculum for girls who read up to the Matriculation or School-leaving examinations is identical with that for boys save that sewing is compulsory up to class V, and domestic science an alternative subject afterwards."[19] In Madras, the Punjab and elsewhere where a school leaving certificate examination is in existence subjects such as physiology, hygiene and domestic economy are included as optional subjects for girls. The position is less happy where the end of the high school course is the matriculation. In the Central Provinces "little, if anything, has been done towards the originally contemplated bifurcation of studies—that is, the institution of a purely domestic side to the high school education for such girls as do not contemplate matriculation."[20] Cost and difficulties of staffing have stood in the way. In Bengal "the quinquennium has seen the failure of an experiment made after much anxious thought and careful preparation. The matriculation examination has long conditioned the curriculum and methods of secondary schools, even those for girls. It is unnecessary to labour here the peculiarly inappropriate nature of such a course, but some idea of its futility may be gathered from the fact that in an average year of the quinquennium 1912-17 there were some 2,700 girls in high schools; these girls were all being taught according to a curriculum laid down for an examination which in 1916, 65 girls passed, of whom only half proceeded to a higher university examination. To remove this anomaly, Miss Brock endeavoured to concentrate in one or two schools all preparation for the matriculation examination, thus leaving other schools to give a more fitting education to their girls which should include hygiene, nursing, needle-work, cookery and domestic science. The missionary authorities keenly appreciated the value of the suggested change and joined forces to teach the new curriculum; in each case the experiment was a failure, deplorable indeed, but unavoidable so long as public opinion demands the matriculation examination as a sacrosanct test of the excellence of a high school education. The schools have reverted to their original status as defined by the matriculation course. Thus a well-planned, well-proportioned commonsense scheme has failed because it

High school curricula.

Experiment in domestic science course in Bengal.

[17] Assam, p. 89.
[18] United Provs., p. 119.
[19] United Provs., p. 120.
[20] Central Provs., p. 61.

was not in accordance with present opinion."[21] In the last Review an Indian Inspectress from Bengal was quoted as saying that "the people of Bengal seem to appreciate the matriculation certificate more than any useful practical course of studies and the girls set their hearts on passing the matriculation."[22]

250. I have dealt so far with two of the obstacles to the progress of women's education—prejudice and the obscurity of the advantages to be derived from education. I have now to deal with the third obstacle, the very indifferent quality of the education offered, and to show the steps that are being taken to raise the standard of teaching in girls' schools.

The need for better teachers.

251. The first step is to improve the quality of the teachers in primary schools. "No sensible parent will send his girl to school if the teacher is incompetent, but the stipends now given, unsupplemented as they are by the fees which boys' schools produce, are often insufficient to attract competent men and still less can they be expected to attract qualified women."[23] The prejudice against permitting women to enter the teaching, or indeed any, profession has hitherto restricted the number of women teachers so that an inordinate number of girls' primary schools are conducted by men. Young men for obvious reasons are not often employed but cases are reported where "all the girls' schools in the interior have, for want of mistresses, to be given over to junior unwilling male teachers who simply kill time in order to obey orders and as soon as any loophole is found for them they pick it up and run away."[24] Most of the men employed in girls' schools are old pandits and maulvis, often transferred after superannuation from boys' schools. Discipline and organisation may be better in their hands but it is useless to expect them to show much enterprise or life in their work. If the quality of the teaching in girls' primary schools is to be improved it must be through the agency of women teachers, intelligent enough to accept advice from the inspectress and, if possible, trained for the teaching profession. As yet so poor is the quality of the material that the chairman of one district board condemns all the schools in charge of women as without hope, but is more sanguine about a girls' school that is in charge of an old pandit. There are innumerable difficulties in the way of employing women in village schools. "Apart from the paucity of trained teachers there are other deterring considerations. The educated woman is in any case lonely, and if she is in *purdah* away from her family, the loneliness must be beyond description; yet if she is out of *purdah*, she often loses the

Especially women teachers.

[21] Bengal, p. 63.
[22] Sixth Quinquennial Review, p. 179.
[23] Bihar and Orissa, p. 107.
[24] Indian Education in 1917-18, p. 16.

respect that is necessary to win scholars."[25] This is a universal complaint. "In Kyaukse the establishment of an elementary training class for girls two years ago has caused a remarkable increase in the number of girls at school but injudicious appointments of young girls away from their homes have in the same district produced a series of disasters calculated to bring female education into disrepute with respectable villagers."[26] It is indeed a matter for wonder that, in spite of the difficulties of the position and the unkind scandal which the lonely teacher has to face, candidates are still forthcoming in increasing numbers for village teacherships. In the United Provinces the number of women teachers has increased from 2,125 to 2,720 and the number of trained teachers has risen by no less than 64 per cent. In the Punjab the number of Government training schools for women has risen from one with eighty pupils at the beginning of the quinquennium to eight with 320 pupils. This great increase in the output of trained women teachers must in time tell upon the quality of the teaching.

Difficult position of lonely woman teacher in village.

Increase in numbers of trained teachers.

Secondary schools.

252. Of secondary schools the accounts are much more encouraging. An inspectress in Bengal writes:—

"The middle schools are most important for few Hindu or Muhammadan girls study beyond this stage. They now form a distinct class of schools of a superior type, and in almost all of them there are trained and qualified headmistresses, and the majority of the teachers are trained. Very sound education is being given in these institutions, and they are highly appreciated by the people."[27]

The following are extracts from the report of a Bombay Inspectress:—

"In English the direct method (with variations) is used in 90 per cent. of the schools and is popular. The head mistress of one of the largest Hindu Girls' Schools told me that the girls from Standards I to IV invariably complained to her if the teachers spoke Marathi to them during the English period; it is, I think, a distinct gain when the pupils have come to realise that they are studying a living language. I regret to say the ubiquitous *darzi* has not yet been banished from every school, but he is slowly being replaced by women teachers. The chief drawback in employing a *darzi* is that he is afraid that if he teaches the pupils too much his services will be dispensed with, so he does as much as possible himself, with the result that cutting out a garment remains an unsolved mystery to the pupil. Drawing is taught in almost all

[25] United Provs., p. 122.
[26] Burma, p. 59.
[27] Bengal, p. 64.

instances by professionally trained teachers. A special effort has been made in some schools to correlate this subject with embroidery and pupils are encouraged to make or adopt designs for their own purposes."[28]

Similar favourable accounts are received from other provinces. The schools are not affected by the overcrowding and the competition which depreciate the quality of the work in secondary schools for boys.

253. Although the number of girls who proceed beyond the primary stage is still lamentably small, 30,000 in all India out of a possible school-going population of fifteen millions, still it shows an increase of thirty per cent. over the attendance in 1917.

Colleges for Indian women.

254. When the university stage is reached the assimilation of the courses for boys and girls becomes complete. The colleges for girls in India are few, but they are well staffed and the instruction given in them is of a high standard. Before dealing with the problem of cost as a deterrent to the spread of female education some mention may be made of the more important of them. The Bethune College, Calcutta, founded in 1849, the first Government institution for girls in India, shows an increase in numbers from 78 to 114. The Principal says "the busses are crammed; the hostel is crammed; the lecture rooms are crammed."[29] The Diocesan College, which has had to hire two new outside hostels, is handicapped for lack of funds. On the other hand the Isabella Thoburn College, Lucknow, is splendidly supported by the American Presbyterian and Methodist Episcopal missions, with whose help it is proposed to rebuild it at a cost of six lakhs on a new site. Its enrolment is small and consists almost entirely of Indian Christians drawn from all parts of India. In Madras a large residential block for staff and students was built in the Women's Christian College, and extensive additions were made to Queen Mary's College towards the cost of which the Maharajah of Jeypore contributed one lakh of rupees. There are 35 students at the Kinnird College, Lahore, and a new Government College for women has been opened in this city. The new college includes two high classes as well as two intermediate classes and is thus an institution of the type recommended by the Calcutta University Commission. Provision for science teaching is being arranged, particularly for those girls who desire to proceed to the Lady Hardinge Medical College at Delhi, of which an account is given later.

[28] Bombay report.
[29] Bengal, p. 62.

University for Women.

255. The Shrimati N. D. Thackersay University for Women at Poona in the Bombay Presidency, to which reference has already been made in paragraph 103, maintains a college containing some 30 women. Instruction throughout is in the vernacular. The college course extends over three years and is roughly equivalent to the Intermediate standard in some subjects. For admission to the college courses the candidates are required to pass an entrance examination, the standard of which is somewhat lower than that of the school-leaving examination for the purpose of matriculation held by the Joint Examination Board, Bombay. Sanskrit is the only classical language taught, and comparative religion is one of the optional subjects for degree examinations. The college, since its foundation in 1915, has turned out in all 15 graduates. The University also recognises a normal school for the training of mistresses. It is stated that the main underlying principle of the University from its very inception has been to maintain independence in points of framing courses of study and holding examinations. The promoters of the movement realise the importance of Government recognition, but they are not willing to seek it at the expense of their independence.

Committees.

256. Ladies' committees are sometimes formed in connection with girls' schools. They are generally said to be a failure and the ladies have not shown any keen desire to take an active part in the management of schools. There are some exceptions. In the Punjab the Guru Nanak School at Amritsar is managed entirely by ladies so far as the domestic affairs of the school are concerned. The Punjab Association has a committee of ladies and the lady president pays regular visits to the schools. The Hindu Widows' Home at Lahore has several ladies on its committee of management. It is reported from the Central Provinces that the ladies' committees in Yeotmal continue to do good work and that the mixed committee of the Akola middle vernacular school deserves special mention for its sound and helpful suggestions in many trying circumstances and its unflagging interest in the school. It is to be hoped that interest will be gradually aroused among Indian ladies and that they will be able to devote more of their spare time to social work of this kind. The chief difficulty in the successful working of ladies' committees is that very few educated women are available to serve on them and even those who do have had no experience of committee work.

Hindu Widows Home, Lahore.

257. A fine example of private munificence has been afforded by Sir Ganga Ram, C.I.E., C.V.O., who, with assistance from Government, has constructed a stately building for an Industrial Widows' Home in Lahore and provided an endowment for its maintenance. "Those of the widows who

have acquired a satisfactory measure of general education are trained as teachers and use as a practising school the adjoining institution, Lady Maclagan School, which also owes its existence to the same philanthropist. Others of the widows are trained in industrial work. The number of widows in residence exceeds 30, and a bright and useful future is before this institution."[30]

Seva Sadan Society, Poona.

258. Remarkable success has attended the efforts of the Seva Sadan Society at Poona. Its activities are manifold. It has vernacular and English classes, work-room classes, music classes, a college for the training of primary teachers, first aid and home nursing classes, and classes for the training of nurses and midwives with hostels attached to them. It has over one thousand women and girls in its Poona branch in the various departments of whom 190 live in the four hostels. A large number of those who attend the classes are married women of the working class who come in for two or three hours daily in the morning or evening. The institution has branches in Bombay and Satara. Its aim is to "foster among women ideas of social usefulness and national service suited to the requirements of the country."[31] Credit for the wonderful success which it has achieved must largely be ascribed to the Secretary, Mr. G. K. Devadhar, of the Servants of India Society. The institution has no counterpart in any other part of India.

Expenditure.

259. Finally there is the question of cost. The following two tables show the advance made during the past five years. It should however be borne in mind that the expenditure given below does not include the sums spent on inspection, scholarships, buildings and other miscellaneous objects for which separate statistics for female education are not available.

(1) *Expenditure on institutions for females, by sources.*

Year.	Expenditure from				Total Expenditure.
	Govt. Funds.	Board Funds.	Fees.	Other Sources.	
	Rs.	Rs.	Rs.	Rs.	Rs.
1916-17 . .	26,19,678	19,82,810	5,33,431	18,87,019	70,22,938
1921-22 . .	63,51,849	29,81,277	8,97,729	29,02,704	1,31,33,559
Increase . .	37,32,171	9,98,467	3,64,298	10,15,685	61,10,621

[30] Punjab, p. 130.
[31] Bombay report.

(2) *Expenditure on different classes of institutions for females.*

Year.	Expenditure on				Total Expenditure.
	Arts Colleges.	Secondary Schools.	Primary Schools.	Special Schools and Colleges.	
1916-17 . .	1,38,347	20,45,397	40,04,742	8,34,452	70,22,938
1921-22 . .	2,85,399	37,84,532	73,06,401	17,57,227	1,31,33,559
Increase . .	1,47,052	17,39,135	33,01,659	9,22,775	61,10,621

N.B.—The statistics for European Schools are excluded from these tables.

260. Expenditure on the education of girls has almost doubled. Though an increase is shown under all heads, the most significant is that under the head of local funds. But for a change in accounting in accordance with which Government grants to local bodies, which were formerly classified under local funds, are now shown as expenditure from Government funds, it would be seen that the expenditure by local bodies from their own resources has increased by over 100 per cent. This is partly due, as in the case of boys' schools, to the inevitable rise in teachers' wages. The average annual cost of educating a girl in a high school has increased from Rs. 95 to Rs. 110 and in a primary school from Rs. 7 to Rs. 10. The education of an Indian girl costs the public more than that of a boy, because (*a*) primary education is nearly always, and secondary education often, free, (*b*) there are fewer pupils per teacher than in boys' schools, (*c*) women teachers are actually paid higher wages than men teachers, the exact contrary of the practice in other countries. But even when allowance is made for these factors, the unprecedented increase in local expenditure on girls' schools can only be explained by a very real movement on the part of the public, acting through its representatives, in favour of the education of women.

Progress.

261. The advance made during the quinquennium has not been 'an advance to trumpets,'[32] but it has been a very real advance. There are many signs that public opinion is beginning to realise the weakness of an educational system in which half of the population is allowed to remain illiterate. For years to come progress must be slow. "It would be perfectly easy to multiply schools in which little girls would amuse themselves in preparatory classes, and from which they

[32] Assam, p. 84.

would drift away gradually during the lower primary stage. The statistical result would be impressive, but the educational effect would be *nil* and public money would be indefensibly wasted."[33] One of the chief needs of the present day is so to improve the quality of the work in primary schools that more girls may be enabled and encouraged to proceed to a higher stage of education, eventually to return as teachers to the help of their fellow-country-women. This improvement must be accompanied by persistent but well-considered efforts to overcome the obstructions offered by conservatism and prejudice. In this work the help of the educated women of India would be invaluable, but the co-operation is needed of all who believe that the education of women is essential to national advancement.

[33] United Provs. Govt. letter No. 829, dated 19th May 1916, on female education.

CHAPTER VII.

PROFESSIONAL EDUCATION.

Scope.

262. Both this and the following chapter deal with vocational education in India. The present chapter describes the training given for the liberal professions, the next chapter training for industry and commerce. (In previous reports such vocational training has been described in chapters entitled "professional education," "technical and industrial education" and "the training of teachers").

Control.

263. Admission to the professions in India is controlled neither by the State as in France, where all university examinations are conducted by Government, nor as in England by professional bodies such as the British Medical Council. In India control is in practice delegated to the universities. A graduate in law, for example, is, subject to certain limitations, entitled to practise within the jurisdiction of those high courts which recognise the degrees of the university from which he graduated. There is, however, no uniformity in the requirements of different universities for their law degrees and Indian law colleges vary from well-found and well-housed institutions with strong staffs to classes conducted for a few hours a week by part-time lecturers in borrowed premises.

264. The advantages of having some external criterion of the fitness of candidates for professional careers are forcibly illustrated in the section on medical education. Till recent years the British Medical Council had accepted as registrable qualifications the M.B.B.S. degrees awarded by Indian universities. Enquiry has made them attach certain conditions to their recognition of these degrees. The report of the officer who inspected the colleges on behalf of the British Medical Council shows that even where the regulations of the university satisfied the requirements of the Council they were not always enforced. Another instance of variation in professional standards occurs in the section on engineering. Although for purposes of admission to the Indian Service of Engineers the qualifications of the graduates of the Poona Engineering College are treated as equivalent to those of students from Sibpur, Guindy and Roorkee actually students are admitted to the Poona College a year earlier in their educational career and graduate after a shorter course.

Management.

265. It has been explained in the chapter on administration that professional colleges are, with few exceptions, Govern-

ment institutions. The senior members of their staffs are drawn from the Imperial technical services, the junior members from the provincial or subordinate technical services. The first function of the professional colleges is to provide the Indian staff for the technical departments, *e.g.*, the agricultural, the medical and the educational departments. Now that the supply of qualified men exceeds the number that can be absorbed in the public services, the colleges train men for the private practice of their professions. The cost of equipping and staffing such institutions is so great that it is always likely to remain a charge upon government revenues. Law colleges alone are an exception. They are in most cases managed by the universities.

(I) The Training of Teachers.

Classifications.

266. In a review on education preparation for the teaching profession claims the first mention. The subject falls naturally under three heads:—

(*i*) The training of elementary teachers,

(*ii*) The training of secondary teachers, and

(*iii*) The training of teachers of special subjects.

In addition some mention must be made of the training of women teachers for girls' schools and of teachers for European schools.

(*a*) *Elementary teachers.*

General.

267. The importance of training elementary teachers was early recognised in India, and every province makes a large provision for this purpose. But any generalisations about the number of trained elementary teachers in India and the percentage which they bear to the total number of teachers are misleading. The different provinces vary widely in the qualifications required of the candidates for training, the character of the institutions in which the training is given and the length of the training courses. The term 'trained teacher' consequently has a very uncertain significance.

268. The rapid increase in the number of primary schools during the last ten years (from 123,578 to 160,072) has made acute the problem of maintaining an adequate supply of trained teachers. It is satisfactory to find that most provinces have not hesitated to face this problem and have actually succeeded in keeping pace with the demand by increasing the facilities for training. If we leave out of account for a moment the

varying significance of the term 'trained teacher' the present position is as follows:—

Statistics.

Training schools for masters.

Province.		Institutions.	Scholars.	Female Scholars included in previous column.
Madras		130	7,258	58
Bombay		23	2,083	14
Bengal		108	2,516	...
United Provinces		440	3,793	...
Punjab		18	1,472	...
Burma		52	963	155
Bihar and Orissa		127	2,703	...
Central Provinces and Berar		12	1,421	...
Assam		8	353	...
North-West Frontier Province		4	96	...
Minor Administrations		4	116	12
India	1921-22	926	22,774	239
	1916-17	690	15,980	106

The difficulty of keeping pace with the demand has naturally been greatest in provinces where the supply has always been inadequate to meet the loss by wastage and in provinces where the need for improving the system of training has been no less urgent than the need for expansion.

Bengal.

269. In Bengal, the percentage of trained teachers in primary schools has risen from 15·7 to 22·0. In this province reliance has been placed in the past on guru-training and muallim-training schools, the former training teachers for primary schools and the latter for maktabs. "By holding out the bribe of a stipend, and perhaps by the use of some thinly-veiled compulsion, there are gathered into the guru-training schools a number of teachers whose knowledge of the subjects they teach is little above that of the unfortunate taught. Here they attempt, in one year or in two, to go

through the whole upper primary or middle vernacular course with a top-dressing of the Art and Theory of Teaching superadded. There are no foundations on which to build, so that it is not surprising, to quote the Inspector, Dacca Division, that 'the actual work done by the trained teachers in primary schools is cruelly disappointing.' "[1] It is in fact a misnomer to class the ordinary product of the guru-training school under the head of "trained." To undergo training implies the acquisition of professional and technical skill. "Training as interpreted in relation to primary education in Bengal is merely a despairing attempt to supply by special means some part of what is wanting in the teachers' general equipment."[2] Progress has, however, been made with the system of concentration described in the last Quinquennial Review. While the number of guru-training schools and muallim schools has been reduced from 118 to 102, there are now 22 training schools of an improved type in existence. These new schools have classrooms and hostels for 40 students and cost about Rs. 50,000 each to build. They have a complete course of training for one year and a staff of one teacher in the Subordinate Service on about Rs. 100 per mensem and two in the Vernacular Service. The number of students under training in Bengal has remained nearly constant at about 2,500; and in view of the description given of the guru-training schools it is clear that for some time to come expenditure must be devoted rather to improving the quality of the training given than to enlarging the output.

270. In Bihar and Orissa, where reliance has also been placed upon guru-training schools, an attempt has been made to improve the quality of the teachers trained by demanding higher initial qualifications of the candidates. In 1918 orders were issued that preference should be given to those possessing "middle pass" qualifications. Middle passed students have a one-year course of training while those with lower qualifications have a two years' course. Unfortuately the supply of candidates with middle qualifications has not proved equal to the demand and the admission of students requiring a two years' course will result in slowing down the output of trained teachers besides lowering its quality. It was calculated in 1917 that the annual output of trained teachers required for primary schools was 2,108. There are now 119 schools each capable of holding 20 students. The supply therefore should be sufficient for the demand if there were a sufficient supply of one-year students and if there were no extraordinary wastage. The wastage among trained teachers is, however,

Bihar and Orissa.

[1] Bengal, p. 45.
[2] Bengal, p. 45.

very great. Although 6,453 teachers were trained during the quinquennium the total increase in trained teachers in employ has only been 3,943. This indicates that the profession is not properly paid and that other walks of life are proving more attractive. The head teachers of the training schools were included in the Vernacular Service in 1917 and the staff of each school increased to four. The question of concentrating the schools and improving the quality of the staff is under consideration.

Madras. 271. In Madras there are 58 Government training schools for elementary teachers and 20 aided training schools. The schools are divided into two departments—higher elementary and lower elementary: some of them contain only the latter. The qualifications for admission to the higher department are equivalent to a pass in the vernacular middle examination and to the lower department the completion of the upper primary course. Both in the higher and lower elementary departments the course is one of two years. During the quinquennium the admission of lower elementary teachers to training schools has been discouraged, exceptions being made in the case of teachers from backward and depressed classes. At the same time the number of teachers under training has increased from 3,940 to 6,484.

Bombay. 272. In Bombay the training of teachers for primary schools (the more advanced of which correspond to vernacular middle schools elsewhere) is conducted in vernacular training colleges and training schools. The former teach a full three years' course; the latter a one or two years' course. For financial reasons it has been necessary to increase the output of first year students from training colleges and to restrict the number of third year students. For admission to a training college or school a candidate must have passed the vernacular final examination. An inferior type of institution, the District Normal class, was abolished in 1918. Twenty training schools were opened during the quinquennium but six of these have since been closed. The schools have been hitherto staffed by secondary teachers and a number of unnecessary subjects such as Sanskrit and Algebra were included in the curriculum. These subjects have now been eliminated, and it is proposed to recruit the staff from men who have served in the inspecting line. There were 2,069 men under training in 1922.

The United Provinces. 273. In the United Provinces primary teachers are trained in classes attached to middle schools, each class containing some eight students. Admission is limited to candidates who have passed the vernacular middle examination; the course is of one year's duration. A special instructor is attached to the school to hold charge of the training class. The number of

classes has increased during the quinquennium from 267 to 433 and of students from 1,809 to 8,203. There are obvious disadvantages in relying on small training classes under ill-paid instructors which can only be inspected by the district inspecting staff many of whom have had no training themselves. The Cawnpore Board is experimenting with a large central training class.

274. In the Punjab the training of primary teachers is carried out in normal schools for admission to which a candidate must have passed the vernacular middle examination. The course is of one year's duration. The number of normal schools has increased from eleven to fifteen. A few training classes still exist as a temporary makeshift but their work has been largely taken over by normal schools. One important change in organisation was made in 1920 when six of these normal schools were combined with local Government high schools in order that full use might be made of the staff and buildings of both institutions. The output of trained primary teachers has increased from 784 to 1,105. The Punjab.

275. In the Central Provinces elementary teachers are trained in large normal schools each of which, with the exception of the Urdu Normal School, is designed to hold 150 students. In order to cope with the increased demand for teachers the number of normal schools was increased from seven to twelve. The number of teachers under training rose from 609 to 1,421. The Central Provinces.

276. In Burma the work of preparing teachers for primary schools appears to be passing gradually from the vernacular normal schools to the elementary training classes. These classes were originally "intended to afford a year's practical training to candidates from backward areas who had passed the fourth vernacular standard."[3] Such candidates are awarded a "B" certificate of training. The classes now admit also candidates who have passed standard VII and these after a two years' course of training are awarded an "A" certificate, as it is hoped ultimately to dispense with the "B" certificate. The instructors employed in these training classes are the product of the vernacular normal schools and the average attendance at a training class is 15. The number of training classes rose from 19 to 58 and the number of students under training from 245 to 845 (including 299 girls). The classes are maintained by District Boards but examined and inspected by Divisional Inspectors or Assistant Inspectors. Burma.

[3] Burma, p. 43.

(b) *Secondary Teachers.*

Secondary teachers—Vernacular.

277. For employment in middle schools and in the middle departments of secondary schools a higher type of vernacular teacher is required. The training of such teachers is provided in some provinces, *e.g.*, in Bengal, Assam, the United Provinces and the Central Provinces, in special normal schools, in other provinces, *e.g.*, Madras, Bombay, the Punjab and the North-West Frontier Province, by special continuation courses in the training schools for elementary teachers. The qualification for admission to training as a secondary vernacular teacher is never lower than the middle standard and in some cases the candidates are also required to have obtained previously an elementary teacher's certificate. In the United Provinces the staffs of the normal schools have been much strengthened and their head masters are now members of the Provincial Educational Service. The number of these schools is also being increased and it is hoped that they may in time provide head masters for 25 per cent. of the primary schools in the province. In the Punjab the large increase in the number of lower middle schools has necessitated the opening of classes for senior vernacular teachers at several of the normal schools. In Bombay the corresponding type of teacher is the third year trained teacher of the vernacular normal college.

Senior vernacular teachers or teachers who have obtained a secondary training school certificate are, as a rule, among the most efficient of the teaching staff. There are, however, exceptions. The work done by the six training schools in Bengal is said to have deteriorated, because the course is too low and the output from the middle schools is now of an inferior quality. "Formerly the hope of obtaining a junior position in a Government school was some inducement to young men of moderate qualifications to join these schools. This hope having been destroyed by recent reorganisations, staffing Government schools only with graduates, deterioration of quality has been very marked."[4]

Secondary teachers—Anglo-vernacular.

278. There is no feature in which the provincial educational systems differ more widely than in the importance which they attach to the training of secondary English teachers. In some provinces, for example the Punjab, it is an established tradition that the teacher in a high school—whether graduate or undergraduate—should have undergone a course of training; in other provinces, such as Assam, there is no institution at all for the training of English teachers. In Bengal and Bombay a trained teacher of English is a rarity.

[4] Bengal, p. 43.

279. There are in all 13 training colleges in India situated at Calcutta, Dacca, Patna, Allahabad, Benares, Lucknow, Agra, Lahore, Peshawar, Jubbulpore, Saidapet, Rajahmundry (Madras) and Bombay. Of these the colleges at Benares, Agra and Rajahmundry have been opened during the quinquennium. Admission to these colleges (excepting those at Peshawar, Lucknow and Agra which train undergraduates only), is ordinarily confined to graduates, and the course of training is usually for one year leading to a degree in teaching awarded by the local university.

280. In addition there are training classes for junior English teachers either under Government or private management. Sometimes these classes form part of the training college. For example, at Jubbulpore, where the Training College was reorganised in 1919, 40 graduates are trained for high departments and 100 undergraduates for work in middle departments. Admission to such classes is generally granted to candidates who have passed the Matriculation examination and the students who gain certificates are employed in the lower classes of Anglo-vernacular schools. In Burma where English is introduced at an early stage the seven Anglo-vernacular normal schools were training 59 women for the kindergarten certificate. The Jubbulpore Training College has also a lady lecturer in kindergarten subjects on the staff.

(c) *Training of special teachers.*

281. Very little provision is made at present for the training of teachers of special subjects. Such training presents peculiar difficulties as the instructor in addition to a knowledge of his subject must have also some knowledge of educational method. Teachers of manual training are trained at Saidapet and ten other manual training centres have been attached to training schools in Madras. Courses of instruction in manual training were held for teachers in the Punjab by the Inspector of Manual Training. In this province there is also a training class for drawing masters attached to the Mayo School of Arts and a training class for teachers of agriculture at the Lyallpur Agricultural College. A recent experiment in the Punjab has been the opening of a class for classical teachers at the Central Training College; the experiment has proved unexpectedly popular with pandits and maulvis, many of whom, though experienced, had had no opportunity of learning class methods and educational practice. There were in the fourth year of its existence 60 teachers in attendance. The opening of a similar class at the Patna College is contemplated. Courses for teachers in agriculture have been held at the Loni School, Bombay. Developments.

(*d*) *Women teachers.*

282. There has been a very welcome increase in the number of institutions training teachers for girls' schools and in the number of students under training. The following table gives the position at the end of the quinquennium:—

Training institutions for mistresses.

Province.		Institutions.		Scholars.	
		Colleges.	Schools.	In Colleges.	In Schools.
Madras		1	31	11	1,565
Bombay		..	20	..	932
Bengal		1	13	13	217
United Provinces		..	31	..	223
Punjab		1	12	33	382
Burma		..	18	..	338
Bihar and Orissa		..	8	..	143
Central Provinces and Berar		..	6	..	194
Assam		..	2	..	34
North-West Frontier Province		..	1	..	30
Minor Administrations		..	4	..	99
India	1921-22	3	146	57	4,157
	1916-17	3	111	49	2,651

Developments.

283. Many of the institutions for the training of women are conducted by missions, for example both the normal schools in Assam and four out of the six normal schools in the Central Provinces. In Madras, a new secondary training school was opened at Cannanore; the Government Hobart Training School for Muhammadan women and the Government Training School, Rajahmundry, were raised to the secondary grade, while a Montessori training class was opened in the Training School at Triplicane. The number of training classes in Bengal for elementary teachers rose from 9 to 12 and the number of pupils completing the course from 71 to 136.

The supply is quite unequal to the demand. The training of teachers for secondary schools is still entrusted to the Loreto House Training Class and the Diocesan College. In Bihar and Orissa the number of women under training remains stationary. The class at Muzaffarpore was badly hit by the non-co-operation movement. The Badshah Nawab Razvi Training College was moved into new buildings which are being improved and enlarged. In this province an experiment in training the wives and other relatives of village teachers shows encouraging success. The United Provinces report a decline in the number of pupils under training, but the opening of additional classes is contemplated. In the Punjab the Government have adopted the policy of taking over the local training classes and converting them into normal schools such as those maintained for men. Of these the best is the Lahore Normal School, now in new premises, with 106 pupils and a staff which contains three lady graduates, two of whom possess the B. T. degree, and a kindergarten specialist. The junior English teachers are trained at the Kinnaird College.

(e) Courses.

In Elementary Schools.

284. The courses of study in elementary training schools are chiefly determined by the qualifications of the students. Where the student himself possesses little, if any, more general education than the pupils whom he proposes to teach little can be attempted during the course of training but to extend his general knowledge. Where on the other hand a middle passed candidate is undergoing training for a post in a primary school it is possible to devote his year of training almost entirely to educational theory and practice, that is to say to technical training in the art of teaching.

In Colleges.

285. In the training colleges for Anglo-vernacular teachers the courses of study are prescribed by the university which awards the degree in teaching. The staff of the training college is usually represented on the university Board of Studies and a satisfactory amount of practical work is included in the courses.

New features.

286. New features have been introduced into the curricula of both secondary and elementary training institutions. At the Patna College all the students went through a course as boy scouts in the hope that some at least of them would carry on this work in their future schools. In Madras too, good progress has been made with the training of scout masters. At Agra excursions, primarily in connection with the nature study course, formed an important part of the work of the Training College. In the Punjab changes have been introduced into the normal school curriculum in the direction of

eliminating subjects such as manual training and formal drawing which the master of a primary school will never be called upon to teach. In the Central Provinces the normal school course was completely revised and now includes in some schools Indian music.

Practising schools.

287. Special practising or demonstration schools are often attached to training institutions. There is, however, great difficulty in affording real practical training suitable for a village teacher at a normal school, since the school is usually located at a centre where the primary schools are all large with each class in charge of a separate teacher. These are not the conditions with which the village primary teacher will afterwards be faced. This difficulty has been boldly met in Assam where each of the normal schools at Jorhat and Silchar has been provided with three practising schools in its compound:—

(*a*) A one-teacher school containing five or four classes.
(*b*) A two-teacher primary school.
(*c*) A three-teacher middle vernacular school.

The schools are intended to be the laboratories of the institution to which they are attached. "For the present it must be our business to put ourselves in the teacher's place, to face his difficulties of ignorance and conservatism, of poor pay, indifferent health, poor quarters, poor equipment, of the school, instead of the individual or the class, as the unit, of large numbers and many classes, of admissions at all times of the year, and of unpunctual and irregular attendance in a timeless countryside."[5] "The vernacular student as a rule is young and has no outlook beyond that of the middle school in the rural town in which he received his earlier training. He is therefore lacking in initiative and experience and is disposed to follow the letter rather than the spirit of what he is taught in the normal school. Nevertheless physical training and games are taken up with avidity and success in some institutions; gardening is a profitable occupation in others; and the principles of co-operation are practically illustrated in nearly all."[6] In the Normal School run by the American Presbyterian Mission at Moga under the Revd. W. J. McKee the students are taught practical agriculture on a farm of fifty acres and are trained in simple village handicrafts in addition to the practice of teaching.

(*f*) *Expenditure.*

Stipends.

288. Teachers in employ who are deputed for training usually receive an allowance equivalent to the pay of their

[5] Assam, p. 80.
[6] Punjab, p. 105.

posts. The rates of stipends to new recruits have had to be considerably enhanced during the quinquennium to meet the increased cost of living, and range as high as Rs. 15 for a primary teacher in Bombay and Rs. 40 for a secondary teacher in the Central Provinces. This increase together with the improvements in the pay of the staff have raised the cost for each student under training as shown in the following table:—

Training Schools. Cost per head.

Province.	Average annual cost per scholar in					
	1916-17			1921-22		
	Rs.	As.	Ps.	Rs.	As.	Ps.
Madras	158	6	9	191	4	8
Bombay	188	0	6	297	7	5
Bengal	151	5	7	192	6	10
United Provinces	133	8	1	246	13	10
Punjab	154	8	1	182	2	2
Burma	284	0	11	169	12	1
Bihar and Orissa	127	11	3	149	11	5
Central Provinces and Berar	151	1	6	245	13	9
Assam	102	13	6	189	12	3
North-West Frontier Province	251	6	4	341	1	5
India	156	14	6	212	2	5

289. Even the increased allowances have not attracted sufficient students. There will never be sufficient (*a*) until the number of institutions preparing candidates for admission (*i.e.*, vernacular middle schools) is adequate: any increase in the number of primary schools must be accompanied by a proportionate increase in the number of vernacular middle schools which supply candidates for training; (*b*) until the general conditions of the teaching profession are sufficiently attractive; and (*c*) until special privileges in the form of enhanced pay are given to trained teachers. The importance of training for a primary teacher being universally recognised, a higher rate of stipend or grant is ordinarily given to the trained primary teacher. This is not the case with secondary General.

teachers. Where the number of trained teachers on the staff makes a marked difference in the amount of grant earned by a secondary school or where, as in the North-West Frontier Province, the award of a grant is conditional on the employment of a certain proportion of trained teachers, then there is no dearth of candidates for training. Indeed the supply of trained secondary teachers in the Punjab actually exceeds for the moment the demand.

(g) European teachers.

Institutions.

290. There are 10 training classes for mistresses of European schools. Amongst these the most important are the Dow Hill Training School for Girls at Kurseong with 17 students and St. Bede's Training College at Simla with 33 students. The Bombay Government instituted a kindergarten certificate for European mistresses for which candidates from St. Mary's Training College, Poona, the Convent Normal Class, Clare Road (Bombay) and St. Denys' Training Class, Murree, appear.

There is only one institution in India for the training of masters for European Schools—the Chelmsford Training College, Sanawar. College work was upset during the quinquennium by the departure of the master-in-charge and eleven of the students on active service. The charge of the training class devolved upon the Revd. G. D. Barne, Principal of the Lawrence Royal Military School, and the assistant master. At the close of the quinquennium there were 15 students in residence, seven from the United Provinces, two each from Madras, the Central Provinces, and Bengal, and one from the Punjab. Lord Chelmsford laid the foundation stone of the new buildings for the college in 1920. They have not yet been completed.

The number of European schools in any one province is so small that it does not justify the opening of a training institution, such as those provided for Indian masters. Only by co-operation between the provinces will the maintenance of an institution like the Chelmsford Training College be possible in the future.

(II) Legal Education.

General.

291. The qualifications required for the different grades of the legal profession have not been altered during the period under review. The higher ranks of the profession consist of barristers, who have qualified in the United Kingdom, and advocates and pleaders (vakils) who have obtained a law degree at an Indian law college. Certain privileges are reserved for barristers. They have generally the right of pre-audience, and in the Calcutta and Bombay High Courts the right of practising on the original side is reserved for them. The

latter restriction does not, however, apply to the Madras High Court, and the Calcutta High Court has abolished the distinctions of precedence between barristers and vakils on the appellate side. There is a considerable volume of opinion opposed to the preferential treatment at present accorded to barristers. It found expression in one of the first resolutions moved in the newly constituted Legislative Assembly in February 1921 and in subsequent resolutions. The aim of these resolutions has been the constitution of a self-contained and unified Indian Bar. The Government of India propose to appoint a Committee to examine the whole question.

Courses.

292. In order to qualify for practice as a vakil a student must first possess a degree in Arts or Science and subsequently obtain a Law degree after a two or three years' course of study in a law college. The degrees are awarded by the universities to which the colleges are attached. The Calcutta University Commission pointed out that the Indian student stands in a position of peculiar embarrassment by reason of the unusual complexity of the law he is called upon to master. He must not only be familiar with the indigenous systems of Hindu and Muslim law; but must acquaint himself with the chief contributions of ever-active legislatures, Imperial as well as provincial, to the statute book; he must have some insight into the principles of English equity and common law; he must possess a thorough grasp of the leading principles of Roman law and modern jurisprudence; and finally he cannot keep himself entirely ignorant of the fundamental principles of procedure. They thought that such a course could not be completed in less than three years, though they did not for practical reasons advocate such an extension of the period of study.

Statistics.

293. Although the profession of law is admittedly overcrowded the number of candidates for the profession has steadily increased. Suggestions and even attempts have been made in different provinces to restrict the number admitted to practice but with no success.

Bachelor of Law Examinations.

Year.	No. of institutions sending candidates.	No. of candidates.	Number passed.	Race or creed of passed candidates.						
				Europeans and Anglo-Indians.	Indian Christians.	Hindus.	Mahammadans.	Buddhists.	Parsis.	Others.
1916-17 .	17	2,729	1,712	..	16	1,500	165	..	14	17
1921-22 .	21	3,519	1,935	7	29	1,621	195	14	15	54
Increase in 1921-22 .	+4	+790	+223	+7	+13	+121	+30	+14	+1	+73

Developments.

294. The increase in the number of candidates is the result of the opening of additional law faculties at four of the newly constituted universities. The universities have not been disinclined to respond to the demand for the opening of law classes because the fees from such classes more than cover the cost of their maintenance. At Madras, for example, where the Law College has a high reputation, the fees contributed to the university chest, after the cost of the law classes had been met, half a lakh of rupees in 1922. Even in Nagpur where the number of students has fallen from 130 to 107 the classes continue to be a source of income. This is partly due to the economical way in which the classes are run with a staff of three part-time lecturers for two hours on three days a week in the Morris College. There has, however, been a welcome tendency in recent years to increase the efficiency of law colleges by the inclusion on their staffs of a certain number of whole-time lecturers and by providing them with special hostels and buildings.

(III) Medical Education.

Statistics.

295. The growing popularity of the medical profession is shown in the following table:—

Medical Examinations for Degrees or Diplomas.

Degrees or Diplomas.	1916-17.			1921-22.		
	Number of institutions sending candidates.	Number of candidates.	Number passed.	Number of institutions sending candidates.	Number of candidates.	Number passed.
Doctor of Medicine or Surgery	..	5	2	1	7	5
Doctor of Hygiene	1	1	1	..	..	..
Master of Surgery	1	1	..	1	3	..
Bachelor of Medicine or Surgery	6	442	283	8	855	406
Bachelor of Hygiene	1	1	..	1	6	1
Final Membership	1	4	1	1	35	10
Bachelor of Sanitary Science	1	2	..	1	7	5
Diploma in Public Health	..	..	..	1	10	7
Licentiate of Medicine and Surgery	4	70	46	3	73	43
TOTAL	15	526	333	17	996	477

Control.

296. The "Regulation of medical and other professional qualifications and standards, subject to legislation by the

Indian Legislature" has been retained as a central subject under the Devolution Rules.

Recognition of Indian degrees by the General Medical Council.

297. In 1921, the General Medical Council of the United Kingdom announced that Indian medical qualifications would cease to be accepted as registrable in the United Kingdom unless the training in midwifery in Indian universities reached the standard required by the Council from all recognised institutions. Dr. (now Sir) Norman Walker, Kt., M.D., F.R.C.P., LL.D., Chairman of the Examination and Business Committees of the General Medical Council, was nominated to discuss ways and means to enable medical colleges in India to comply with the regulations laid down by the General Medical Council. Dr. Norman Walker visited the Indian medical colleges in conjunction with Lieutenant-Colonel R. A. Needham, C.I.E., D.S.O., M.D., I.M.S., during the winter 1921-22. On the report submitted, the General Medical Council recognised the M. B., B. S., degree of the Madras University unconditionally; and granted provisional recognition till June 1923 in the case of the M.B., B.S. degree of other Universities subject to a satisfactory report from an official inspector.

In 1921, the General Medical Council of the United Kingdom decided to postpone a decision on the question of the recognition of the Fellowship and Membership of the College of Physicians and Surgeons, Bombay, until the question of adequate midwifery training in the universities should be settled.

All-India Medical Act.

298. It has not yet been found possible to introduce a Consolidated Medical Act for All-India.

Assistant Surgeons.

299. Pupils for the assistant surgeon branch of the Indian Medical Department are now admitted by nomination to the medical colleges at Madras and Calcutta where they undergo a five years' course of instruction to obtain a medical qualification from an authorised examining body in Madras or Calcutta, entitling holders to registration under the provisions of the Indian Medical Degrees Act, 1916, before they are gazetted into the Department.

Developments.

300. The King George's Medical College has surrendered its affiliation to the Allahabad University and is now an incorporated college of the unitary teaching University of Lucknow, and the professorial staff of the College is appointed by the University. The Carmichael Medical College, Belgatchia, Calcutta, has now been affiliated to the Calcutta University up to the final M.B. standard.

In 1921, a "State Medical Faculty" was constituted in the Punjab for the purpose of examining and granting

licenses to practitioners of the sub-assistant surgeon class. The Medical School from Lahore has been transferred to Amritsar and both this school and the school at Agra have been placed in charge of whole-time principals. The employment of whole-time principals for the Temple Medical School, Patna, and for the Nagpur Medical School has been sanctioned but such appointments have not yet been made. A scheme for the conversion of the Temple Medical School, Patna, into a medical college for Bihar has been sanctioned and work commenced. The classes of instruction at the X-Ray Institute, Dehra Dun, are once again in full working order; and the maximum number admitted to each of the two classes held in the year has been increased from 20 to 40. The School of Tropical Medicine, Calcutta, has now been opened and provides two courses of instruction annually; one course of six months at the conclusion of which an examination is held for the Diploma in Tropical Medicine; and another course of three months' duration after which a certificate is granted. The Calcutta Institute of Hygiene has also been started. On completion of the course, which lasts from nine to twelve months, students are entitled to admission to the examination for the Diploma of Public Health of the Calcutta University. The course of training is so arranged that post-graduate students have the opportunity of attending certain of the special classes and demonstrations included in the course laid down for the Diploma in Tropical Medicine.

Lady Hardinge Medical College, Delhi.

301. The Lady Hardinge College for Women, the only institution of its kind in India, was opened by Lord Hardinge in February 1916 as a memorial to its founder, Lady Hardinge. The hospital attached to it was opened by Lady Chelmsford in March 1917. The main object of the institution is to provide complete courses of instruction to Indian women who wish to qualify for a university degree in medicine or to receive a full training as nurses or compounders. An additional object is the provision of medical, surgical and obstetric treatment for women, having a due regard to purdah and caste customs. The College and Hospital buildings, together with hostels for medical students and nurses, residences for the staff and playing fields, are grouped in one large compound half way between the new capital and the old city of Delhi. The college buildings consist of three blocks. The central group contains a large convocation hall, library, museum, offices and professors' and students' common rooms. On either side of this are the two science blocks comprising well equipped laboratories and lecture rooms. The hospital, when in full working order, will contain 200 beds. At present the average number of

in-patients is well over 120. The Medical College is affiliated to the Punjab University, and the students are prepared to sit for the University examinations for the M. B., B. S. (Lahore) degree. This entails a seven years' course, comprising two years of science, after which the F.Sc. examination is taken, and five years of medical subjects. Accommodation is provided for 100 medical students, of whom the Hindus, Sikhs and Muslims live in separate hostels. In the session 1921-1922, eighty-three students were in residence, and by the autumn of 1923, when the most senior year will graduate, all places are expected to be filled. Of these 83 students, 25 are Hindus, 20 Indian Christians, 12 Sikhs, 14 Anglo-Indians, 3 Muslims, and the rest Portuguese, Europeans or Jews. The students come from all parts of India. Of the 83 students, 20 are from the Punjab, 12 from the United Provinces, 9 from the Central Provinces, 5 from Sindh, 7 each from Madras and Burma, 4 from Delhi, 3 each from Bombay, the Deccan and the North-West Frontier Province. 31 students are taking the science course and the rest the medical course. A new building, the Lady Reading Hostel, has subsequently been opened by His Excellency the Viceroy. The institution is maintained partly from the interest on the original donations, partly by subscriptions and partly by grants from central revenues. The results of the first public examinations, at which the students have appeared, show that the work of the college is of a high order.

(IV) Engineering Education.

302. Under this head are comprised a number of institutions, departments and classes ranking from colleges of engineering, which prepare students for degrees and for the higher ranks of the profession, down to classes and courses for artisans and apprentices in railway workshops. Many of these humbler forms of educational activity are described under the head of "technical education" though they seem to have some right to inclusion in the present section, because they actually form part of the work of some of the engineering colleges. Classes for artisans, for example, are found at both the Sibpur and Poona Engineering Colleges. Scope.

303. There are five colleges of engineering in India, four under Government management situated at Sibpur (Calcutta), Roorkee, Poona and Guindy (Madras) and one under private management at Benares. The present enrolment and expenditure are shown below. Statistics.

Colleges of Engineering.

Name of College.	Scholars.	Expenditure.
		Rs.
1. Bengal Engineering College, Sibpur . .	356	3,25,965
2. Thomason Civil Engineering College, Roorkee	237	4,58,645
3. College of Engineering, Poona . . .	194	1,53,207
4. College of Engineering, Guindy . . .	449	2,31,509
5. Engineering College, Benares . . .	207	17,465
TOTAL . .	1,443	11,86,791

Recruitment for Engineering services.

304. The recommendations of the Public Works Reorganisation Committee on the education of engineers were quoted in the last Quinquennial Review. In order to appreciate the effect of their proposals it is necessary to realise that the training given in the engineering colleges and engineering schools in India had been specifically directed towards the supply of recruits to the different ranks of the Public Works Department. The upper ranks of the Department were filled by members of the Imperial and Provincial Engineering Services,—services equal in status, though not in emoluments, —the former recruited in the United Kingdom, the latter from the graduates of the engineering colleges in India. The inferior appointments in the department were filled by two classes of recruits—Upper Subordinates and Lower Subordinates. Under the scheme of reorganisation since adopted the Department consists first of an all-India Service called the Indian Service of Engineers, secondly of Provincial Services named after the provinces in which the appointments are held, *e.g.*, the Madras Engineering Service, the Bengal Engineering Service, etc., and thirdly of the Subordinate Services. Recruitment to the Indian Service of Engineers is made either in the United Kingdom or in India, the emoluments of both classes of recruits being the same except for an overseas pay for those of non-Indian domicile and a technical allowance for those recruited in Europe, whether Europeans or Indians. The Provincial Engineering Services are recruited from the graduates of the engineering colleges. The training of subordinates is conducted either in engineering schools such as those at Nagpur and Rasul or in classes attached to the colleges. The general effect of these

changes is to establish a professional class of trained engineers who may or may not choose to enter the Indian Service of Engineers or the Provincial Engineering Services and at the same time to provide a class of men suitable to take less responsible engineering appointments, who may, for example, find employment under local boards.

Admission and courses —Conference of Principals.

305. The age and qualifications for admission to the engineering colleges and the length and character of the college courses were considered at a conference of Principals held in July 1921. The conference was impressed with the desirability of providing in India opportunities for the study of engineering in all its branches up to as high a standard as that taught elsewhere, in short of establishing in India a fully qualified engineering profession. They believed, and the report of the Public Works Reorganisation Committee confirmed their belief, that the engineering colleges in India were capable, if properly staffed and equipped, of providing such an education. They recommended that the minimum educational qualifications for admission to an engineering college should be the intermediate examination of an Indian university or any examination which might be instituted of a similar standard, including in all cases a pass in English, mathematics, physics and chemistry; to this should be added an admission test in drawing. There should be no limit of age for admission to the colleges and such age limits as at present exist should be abolished. The college course should be of four years' duration leading up to a degree in engineering awarded by the university to which the college was affiliated. The Public Works Committee had recommended that practical training should form part of the preliminary course for a degree but the conference pointed out that this was not the case in the British Isles or elsewhere and they did not consider that a university was the best constituted body to judge the results of a student's practical training. They recommended that a college diploma should be awarded on the results of a further year of practical training, and that the possession of this diploma should be an essential qualification for admission in the Indian Service of Engineers or Provincial Engineering Services. These proposals are now under consideration by local Governments.

The recommendations, so far as they concern the admission to the colleges and the length of the degree courses, are now in force except at the Poona Engineering College. Admission to this college is obtainable by students after one year's attendance at an Arts College and the degree in engineering is awarded after a three years' course: actually the competition for admission is so great that the raising of the standard to the intermediate will not affect the attendance.

Developments.

306. Various steps have been taken in recent years to improve the colleges. The Madras Engineering College has now been moved to new buildings at Guindy which have been erected at a cost of no less than twenty lakhs. The College had not, however, been fully equipped at the close of the quinquennium. The posts of Principal and Professor of Mathematics were included in the Indian Educational Service and two new posts in that Service for a professorship of Technical Chemistry and an additional professorship of Civil Engineering were sanctioned. The staff of the Roorkee College was reorganised in January 1922 by the addition of three assistant professorships and by a general improvement in the rates of pay. The Sibpur Engineering College has been rechristened the Bengal Engineering College. A new Assembly Hall has been completed. The system of appointing practising engineers as visiting teachers of special subjects such as water-supply and drainage has met with considerable success. Extensive alterations and improvements have been made at the Poona College. The College committee was reconstituted in 1921 with an unofficial majority and an elected chairman. There were at the end of the quinquennium 194 students of whom 27 were studying mechanical engineering.

Mechanical Engineering.

307. The Government engineering colleges make provision for instruction in mechanical engineering, but the Engineering College of the Benares Hindu University specialises in this branch. The College is fairly staffed and equipped and had 207 students in 1921-22. Admission is at the intermediate stage. The Punjab which relies on the Thomason College, Roorkee, for its supply of civil engineers for the senior services, proposes to open a college of mechanical engineering at Moghulpura (Lahore). At this place are situated the workshops of the North Western Railway which will be available for the practical training of the college students.

Engineering schools.

308. Next in importance are the Government Engineering schools situated at Vizagapatam, Trichinopoly, Dacca, Patna, Lucknow, Nagpur, Rasul (Punjab) and Insein (Burma). These institutions prepare candidates of the Upper Subordinate and Lower Subordinate type. The qualification for admission to an engineering school is usually the matriculation, but the length of the course varies in different provinces from two to three or even five years. The Ahsanullah School of Engineering, Dacca, was moved to new premises when the University was opened and its further development is under consideration. New buildings and hostels are under construction at Rasul. A committee appointed in 1921 to consider the future of the Government Engineering School, Insein, recommended that its status should

be raised and that it should be transferred to Rangoon where it would be in touch with the University, where, too, it would be able to open evening classes for which there is a considerable local demand. The Bihar School of Engineering at Patna will also shortly be reorganised and raised to the status of a college affiliated to the Patna University. The Government Engineering School, Nagpur, contains, besides a civil engineering department, a department of mechanical engineering including motor mechanics. Boards have been constituted in connection with both departments the object of which is to keep the school in touch with employers of labour.

Mining Engineering.

309. At present no facilities exist for the advanced study of mining engineering in India. The establishment of an Imperial School of Mines at Dhanbad in Bihar has been sanctioned and the construction of the building has commenced. Meanwhile under the auspices of the Mining Education Advisory Board courses leading up to the award of the colliery manager's certificate are conducted by the Bengal Engineering College and at several centres, *e.g.*, Jharria and Sijua in the coal-fields.

Survey.

310. Surveying is taught only in connection with the supply of subordinate officials, amins, patwaris and kanungoes in the departments of Revenue and Land Records. Usually the schools are opened on a temporary basis in localities where a supply of such officials is needed. The popularity of these schools depends largely on the prospects of securing service under Government. Thus Burma records a great increase in popularity while Bihar and Orissa reports the closing of some schools. The Mahamati Survey School, Comilla, with 50 students is the most important in Bengal. Its building was struck by lightning and burnt down, and it is at present housed in temporary premises.

Metallurgy.

311. The Jamshedpur Technical Institute was opened in November 1921 by the Tata Iron and Steel Company. The local Government has contributed a lakh of rupees towards its initial cost and a maintenance grant towards the recurring expenses. "Applicants for admission must have passed the Intermediate examination in Science and be physically fit to withstand hard work. Each student receives Rs. 60 a month during his course of training and afterwards may be required to serve the Company for a period of five years on an initial salary of Rs. 200 a month. Increments will be in accordance with ability and results shown. An academic course in the metallurgy of iron and steel extending over three years and equal to the standard of an English University is given. At

the same time the students have an invaluable opportunity of getting first hand knowledge of the practical side of the subject because they work alternate weeks throughout their course at various tasks in the Tata Iron and Steel Works. The whole scheme is on lines somewhat different to any hitherto tried and in some ways is in advance of that in vogue in the Metallurgical School of the University of Sheffield. It has been well thought out and the prospects before any youth fortunate enough to obtain admission to the Institute are indeed bright. The management of the Institute and its funds is in the hands of a governing body consisting of five members, one being the Director of Industries."[7]

(V) Agricultural Education.

General.

312. Although considerable thought had been devoted to the problem of agricultural education since the foundation of the Agricultural Department in 1906 and large sums had been expended on the construction and equipment of agricultural colleges, the results were for the first ten years disappointing. The reasons for this were considered at conferences held in 1916 and 1917. The general conclusions of these conferences are recorded in the last Review. They were to the effect that—

(*a*) provinces should be left to work out their own collegiate courses with reference to local conditions and also to decide the question of the affiliation of agricultural colleges to local universities;

(*b*) the diploma course qualifying men for subordinate appointments, for estate management and for private farming should be separated from the degree or superior course;

(*c*) agricultural middle schools on the model of that instituted at Loni (Bombay) should be opened in other provinces.

All three recommendations have to a certain extent been carried out, though the Board of Agriculture held at Pusa in 1922 has thought fit to modify the last recommendation.

Statistics.

313. Out of the five existing agricultural colleges three are already affiliated to universities and the remaining two will also be incorporated with the local universities in the near future. The diploma or certificate course has been separated from the degree course wherever it is held. Agricultural middle schools have been started in Madras, Bombay, Bengal, the United Provinces, Bihar and Orissa and the Central Provinces. Statistics regarding them are given below.

[7] Bihar and Orissa, p. 95.

Agricultural Schools.

Province.	Institutions.	Scholars.
Madras	1*	38
Bombay	5	134
Bengal	2	56
United Provinces	1	33
Bihar and Orissa	1	79
Central Provinces	2	34
TOTAL	12	374

* One more school was opened immediately after the quinquennium with six pupils on the rolls.

Higher Institutions.

314. For higher education, in addition to the Agricultural Research Institute, Pusa, there are Agricultural Colleges at Poona, Lyallpur, Cawnpore, Coimbatore and Nagpur, and it is proposed to open shortly provincial institutions at Dacca and Mandalay to serve the needs of Bengal and Burma.

Pusa Institute.

315. Higher education in agriculture and its allied sciences is still provided at the Pusa Agricultural Research Institute where post-graduate courses are given. During the quinquennium, thirty-six students underwent courses in different branches.

A scheme for the expansion of the Institute to provide training on a larger scale both for direct recruitment and for promotion to the Imperial Service has been under consideration by the Government of India. While excellent facilities exist at the Institute for a complete training in Chemistry, Botany, Bacteriology, Entomology and Mycology, the training in the general branch has, owing to the width of the subject, all along presented considerable difficulties and no completely satisfactory course is at present to be had inside the country.

The qualifications accepted from candidates for this branch of the Service recruited abroad are—

(*a*) A degree or diploma of a recognized University or Agricultural College.

(*b*) A year's experience in practical agriculture.

Post-graduate Studies.

316. India at present possesses five well equipped agricultural colleges teaching up to a standard similar to recognized agricultural institutions abroad, but facilities for obtaining a correspondingly good post-graduate experience are non-existent for a variety of reasons, chiefly the backwardness of agriculture and the small size of the holdings in the country. At a conference held at Pusa in February, 1922, it was decided that the only satisfactory alternative to going abroad for this experience was the institution inside the country itself of courses in special branches of practical agriculture suited to graduates or diplomates from the Indian agricultural colleges. Animal husbandry and agronomy, agricultural engineering and plant industry were suggested as suitable branches of the main subject for instruction for post-graduate students and it was recommended that a six months' course in two of these subjects should be considered in addition to the full diploma or degree course at a provincial college as a qualification for the general branch of the Indian Agricultural Service.

It is the intention of the Government of India to establish courses of the type recommended by the Pusa Conference when funds permit. They consider however that at present it will not be possible to combine animal husbandry and agronomy and have decided that the special course in this branch should be animal husbandry and dairying. Since the close of the quinquennium under review it has been decided to transfer three of the military dairy farms to the Agricultural Department. This will provide the latter with nearly all the equipment necessary.

The Government of India have decided to make a start with this course at Bangalore from the 1st November 1923. The question of the training of specialists, such as chemists, botanists, etc., presents little difficulty as facilities are already in existence.

Provincial Colleges, Poona.

317. The Agricultural College at Poona which is affiliated to the University of Bombay has steadily increased in popularity since the revision of the course in 1916, the number of students taking the graduate course having increased from 115 in 1916 to over 200 in 1921. The new syllabus is generally admitted to be an improvement on the old one and the teaching better. Consequently, the students who leave the College now are considered better trained than was formerly the case. It is reported that an increasing number of graduates now prefer to go back to the land and manage their own farms. The University has instituted a degree of Master of Agriculture.

318.—The other College with a University course is that at Lyallpur which was affiliated to the Punjab University in 1917. There are now two distinct courses:— Lyallpur.

(1) The Degree Course which is subject to University rules and regulations, and
(2) The Certificate Course.

The Degree Course takes four years and is divided into two parts, *i.e.*, two years for the first examination in agriculture corresponding to the F.Sc. examination, and two years for the B.Sc. in Agriculture. The certificate course lasts two years. The tuition and subjects in the first year are the same as for the degree course. In the second year very little science is taught and the course is mainly in agriculture with some applied science. Since the affiliation of the College to the University the standard of the candidates for admission has continued to improve. A steady increase in the number of applications for admission to the College marks its popularity, but owing to shortage of accommodation the number of admissions has been restricted to below 60 every year. The total number of students on the roll was 195 in 1921-22. A gratifying feature is that the number of agriculturists turned out by the College is steadily increasing.

Regulations for starting an M.Sc. research course have been passed by the University, but a beginning will not be possible until the staff has been strengthened.

319. The Agricultural College at Cawnpore continued to give two separate courses of instruction—the higher or diploma course of four years and the lower or vernacular course of two years. The diploma course is steadily increasing in popularity among the sons of Taluqdars and big landlords, and several of them are joining with the object of taking up agriculture as a profession. The vernacular course also continues to draw a satisfactory class of students, and such boys of the landowning community as are not qualified educationally for the diploma course are getting themselves admitted for this course. There were 103 students on the roll during 1921-22 for both of these main courses. Two important developments during the quinquennium under review are the acquisition of an area of 380 acres for running as an estate in connection with the College to represent the capitalistic aspect of agriculture from the point of view of the large landholder and the establishment of an up-to-date dairy which should form a valuable adjunct both for teaching and demonstration. Cawnpore.

Steps are being taken for the affiliation of the College to, and its incorporation with, the Allahabad University as recommended by a Committee appointed to consider the subject.

It is however proposed to make provision for the continuation of the diploma course, the demand for which comes from a class which is not generally qualified for admission to a University.

Coimbatore.

320. Two courses of instruction, the certificate course for two years and, in continuation, the diploma course for a further period of 20 months—were continued at the Agricultural College at Coimbatore till 1920 when, owing to the necessity for attracting a better class of students, the two courses were entirely separated, the "Certificate Course" remaining similar to the old short course and lasting two years and the "Diploma Course" lasting for three years and giving instruction in the applied sciences as well as in agriculture. Admissions to the Diploma Course are restricted to students who have passed the Intermediate examination of the Madras University and 20 scholarships of the value of Rs. 25 each per month have been instituted by Government to attract better qualified students to the course. The separation of the courses and the raising of the standard of qualification for admission to the Diploma Course have however seriously affected recruitment, although the college has recently been affiliated to the Madras University and the diploma course will now lead to the University degree of B.Sc. (Ag.). The number of applications for admission to the certificate course dropped from 395 in 1919-20 to 95 in 1921-22. There was also a marked drop in the intellectual standard of the applicants. The unpopularity of the course shows that its attractions for the aspirant to Government service are gone as it now leads only to the lower division of the subordinate Agricultural Service and that there is still practically no demand for agricultural education for its own sake.

For the degree course 93 applications were received in 1921-22. Out of these 19 were selected, but most of them were from a class of people whose leanings were intellectual rather than agricultural. In order therefore to get a right type of candidate for the course the Government are moving the University to declare the certificate course with the addition of English a qualification for appearing for the B.Sc. (Ag.).

Nagpur.

321. The Agricultural College at Nagpur continued till 1921 to give the students two courses of instruction one of two years and the other of four years. All students used to start together whether they were meant for the four years' course or only to complete the shorter one. At the end of the first year there was splitting off of the boys who were not likely to reach the longer course, but the examination at the end of the second year finally decided the selection for the

longer course. In 1921-22 however the two-year or certificate course was definitely separated from the 3½-year or diploma course, and only candidates of the Matriculation standard are now allowed to take the latter course. A revised syllabus of studies has been drawn up for the diploma examination, which, while maintaining a sufficiently high standard on the practical side, should render affiliation with a University easy. The number of students on the roll at the end of 1921-22 was 52, but increased to 77 in the session which began in June, 1922.

Sabour.

322. The Agricultural College at Sabour in Bihar and Orissa continued to deal with a two-year certificate course, but as most of the students who took admission came from Bengal and Assam and as there was a very poor demand for agricultural education among the people of the province, it was decided to close the College in 1923, on the recommendation of a Committee appointed by the local Government to consider the future of the Institution. No students are accordingly now admitted.

Proposed Dacca Institute.

323. A proposal has been sanctioned for the establishment of an Agricultural Institute at Dacca for giving a thorough practical training in agriculture to young men who have already been through a course in pure science. The course will consist almost entirely of practical instruction besides lectures on plant breeding, farm accounts and surveying. There will also be a dairy and the syllabus will provide for instruction in the feeding and management of cattle. The construction work is however held up owing to want of funds.

Mandalay.

324. In Burma, proposals for the establishment of an agricultural college at Mandalay were sanctioned during the quinquennium and the foundation stone was laid on 27th August 1921, by Sir Reginald Craddock. It is hoped that the college will be complete in 1924.

Rural Education. Agricultural Middle Schools.

325. Although it is a fact that there is an appreciable demand in India for agricultural education apart from what is being given at the Agricultural Colleges, yet it has not been decided how far the Agricultural Department is to add to its responsibilities by undertaking any system of education other than that being given in these colleges. The subject was discussed at considerable length by the Poona Board of Agriculture in 1917 which recommended that while rural education was primarily the business of the education department, in view of the possibility of a demand for a purely agricultural education arising through a general advance of the people themselves, a limited number (one or two in each vernacular tract) of agricultural schools based on the Loni (Poona) Model should be opened as an experimental measure.

Accordingly, Agricultural Middle Schools have been opened in some provinces but in others agriculture has been added to the curriculum of ordinary middle schools. These different systems of agricultural education are experimental and the experience so far gained seems to show that Agricultural Middle Schools of the Loni type are expensive and there is no likelihood of their number being increased to any considerable extent in the near future. The subject was discussed at the Board of Agriculture held at Pusa in 1922 in the light of experience gained in different provinces. The Board did not think that this type of agricultural middle school was universally applicable and were of opinion that the different provinces will probably require to develop on quite different lines according to local conditions. They therefore passed the following resolution:—

"That while maintaining the position taken at the Board of Agriculture in 1917, the Board is of opinion that the Agricultural Middle Schools there suggested do not, by any means, exhaust the methods of agricultural education which can be suitably applied, and invites local Governments to consider carefully the schemes which are being developed in the Punjab and elsewhere, and would urge experiment as to the methods most suitable for the very varying conditions in different parts of the country."

The position therefore at present is that experiments are being made with different types of agricultural schools suited to local conditions and needs. The future probably lies with the Punjab scheme (described below), which leaves to the Education Department to provide some agricultural training alongside a general educational training, the Agricultural Department only assisting in the way of training suitable teachers.

Progress in provinces.

326. Five Agricultural Schools with 134 students are at work in Bombay, out of which four are believed to be successful although there are differences of opinion as to how they should be developed in order to obtain the maximum advantage. The schools aim at taking boys of 13 to 14 years of age who have passed the fourth vernacular standard and continuing their general education for two years adding to it instruction in Agriculture. With a view to provide for regular inspection of these schools the appointment of an Inspector of Agricultural Schools has been created.

A scheme has also been adopted for the experimental organization of a number (not exceeding 20) of primary schools with a pronounced rural outlook and teaching with a definitely agricultural complexion. The teachers for these schools in the Marathi areas are being trained at the Loni school.

327. There are two agricultural middle schools in Madras, the one at Taliparamba and the other at Anakapalle. Special text books for these schools and also for the use of teachers in the elementary schools of the Coimbatore district have been prepared.

328. In Bengal, two agricultural middle schools were started at Dacca and Chinsurah with the object of providing general instruction to the sons of cultivators and of teaching them up-to-date methods of practical agriculture; in other words, to provide an education for the sons of cultivators without diverting them from their traditional occupation. The boys to be admitted were to have completed the sixth standard or passed the upper primary scholarship examination. All candidates for admission were required to declare that they intended to continue cultivation after leaving school. No difficulty has been met with in obtaining plenty of pupils at Dacca, but at Chinsurah recruitment has been difficult. The two years' course at Dacca has now been completed, and the Government of Bengal has come to the conclusion that the course is unsuitable. Very few pupils are returning to the land or finding suitable employment. These two schools have therefore been converted into secondary agricultural schools for giving a higher form of training to the sons of peasant proprietors or those who have a direct interest in the land. The curriculum is so designed as to train the students to farm their own lands or become demonstrators in the department or teachers in elementary agricultural schools, a number of which are to be started as an experimental measure.

329. In the United Provinces an Agricultural school has been started at Bulandshahr in 1921 with 33 students. The school aims at giving a thoroughly practical course for the sons of small zemindars or substantial tenants who will return to work their own holdings. It thus repeats, in essentials, the certificate course of the college with the difference that the appeal is purely local. When the college is affiliated to the university, it is proposed to transfer the certificate course to several such schools in different typical tracts.

330. In the Central Provinces, two agricultural schools were started 3 years ago at Chundkhuri and Pawarkhera, but as experience has shown that there is no local demand for the kind of semi-vocational training given in these schools, it is proposed to experiment in the direction of giving a course of agricultural instruction in the ordinary vernacular middle schools of the Education Department.

331. In the Punjab, ordinary vernacular middle schools are utilized for imparting a practical training in agriculture to school boys in rural areas. This departure from the system

of Agricultural Middle Schools was recommended by a Provincial Committee on the ground that only the less ambitious and less intelligent country boys would be likely to attend a special vocational school at so early a stage in their educational career, for a pupil entering an agricultural middle school must give up all hopes of higher education. The committee felt that as many sons of agriculturists as possible should have some technical training in their hereditary calling to which they would revert if at any time their higher education were interrupted.

332. The special features of the Punjab scheme are that (*a*) a farm is attached to the school with an area and equipment sufficient for practical training on a reasonably large scale, and that (*b*) the training is given not by one of the ordinary school teachers but by a teacher specially selected for the work and trained for a year at the Agricultural College at Lyallpur. The scheme has achieved an immediate popularity, and arrangements for the teaching of practical agriculture are already either in progress or nearing completion in about 50 institutions, or a quarter of the total number of vernacular middle schools in the province.

Details of the scheme are as follows:—

(*a*) The responsibilities of Government in the provision of land, buildings, equipment and bullocks are estimated at Rs. 3,500 for each farm. Owing to the general rise in prices it has been found in practice that this estimate has been slightly exceeded. It has also been found in practice more economical to hire the land than to acquire it.

(*b*) The recurring charges are mainly on account of the pay of the teacher and the feed of bullocks. It has been found, however, that a five-acre farm can be made practically self-supporting, whereas a farm of three acres, which was the limit originally laid down, cannot cover expenses.

(*c*) The course of studies is confined to the middle classes, and comprises instruction in the class room, supplemented and illustrated by practical work in all agricultural processes on the land. The usual amount of time devoted to this subject is six periods per week per class, so that for a course comprising the four classes the teacher is engaged in actual instruction either in or out of doors for twenty-four periods a week.

(*d*) The supply of teachers is by selection. District Inspectors are asked to select senior vernacular trained teachers of the agricultural class and possessing

special aptitude for the work for a course of training in the Lyallpur Agricultural College. The teachers' class in this college was started in July, 1919. Sixty teachers have so far taken the course and seventeen are now under training. The scheme of studies is essentially practical, and aims at giving a sound training in the elements of agriculture with some knowledge of allied sciences. Experimental and observational methods of teaching the subject are practised by the teachers under training, under the supervision of their instructors, on the boys of the rural schools in the neighbourhood of Lyallpur.

333. Land has been acquired for the proposed agricultural school at Pyinmana in Burma, and the American Baptist Mission, which is to be in charge of it, hopes to begin teaching in 1923.

334. Twenty-three students were under training at the Hebbal school in Mysore which conducts a three-year course in English. The demand for admission has gone down partly on account of the fact that the prospects of Government employment have become considerably less owing to the financial stringency. The other school at Chikkanhalli, which has been conducted as a grant-in-aid institution for the last seven years, with a vernacular course extending over 12 months, has been handed over to the department by the original donor. Under the new arrangements it will be possible to improve the course and extend the usefulness of the school.

335. There were 250 applications for admission into the agricultural middle school opened during the year 1921-22 at Alwaye in Travancore which has accommodation for only 32 students.

Short courses in colleges and on Government farms.

336. Courses of instruction of shorter duration in practical agriculture continued to be given on the college farms or other farms of the Department. In the Punjab a six months' course in vernacular has been provided at Lyallpur college and is taken advantage of by sons of farmers and employees of the Co-operative Department. There is also a rural economy class at the same college which lasts for a month and a teachers' class which lasts for one year.

At the Poona College also there is a short course in agriculture intended for farmers' sons who know English but who are not qualified to take the University course in agriculture. It lasts for one year.

In Madras there are half-time schools for juveniles and night schools for adult agricultural labourers on the farms at

Coimbatore, Palur and Anakapalle. These are reported to be doing fairly well, but the results are said to be incommensurate with the expenditure.

Short practical courses in general agriculture have been started on two farms in the Central Provinces. On the Nagpur Farm a 3 months' training in the driving of Motor tractors and the handling of tractor implements was given during 1921-22 to about 20 men.

In Assam, apprentices for employment as demonstrators are trained on the different farms of the province. The training lasts for 2 years and the students get systematic instruction in elementary facts connected with agriculture and simple training in insect pests and their control.

Similar facilities have also been provided at Mandalay in Burma for the training of Junior Agricultural Assistants required by the local Department.

Libraries.

337. The fourth edition of the Pusa Library Catalogue was issued during the period under review. The Institute Library is now one of the most up-to-date libraries in the East on agriculture and allied sciences and is freely taken advantage of by scientific workers in India.

Some of the Provincial Colleges also have got libraries reputed to be the best of their kind in India.

Text Books.

338. The following text books have been published during the quinquennium:—

(1) The Agricultural Problems in India by Rai Bahadur Gangaram, C.I.E., M.V.O.

(2) A Hand Book of Nature study and Simple Agricultural teaching for the primary schools of Burma by E. Thompstone, B.Sc., Deputy Director of Agriculture, Burma.

(3) Plant Types for college students by Father Ethelbert Blatter, S.J., Professor of Botany, St. Xavier's College, Bombay.

(4) Fungi and Diseases in Plants by Dr. E. J. Butler, M.B., F.L.S., Imperial Mycologist, Pusa.

(5) Text Book of Punjab Agriculture by W. Roberts, B.Sc., and O. T. Faulkner, B. A.

(6) A Hand Book of some South Indian Grasses by Rai Bahadur K. Rangachari, M.A., L.T., Government Lecturing Botanist, Agricultural College, Coimbatore.

(7) A Manual of Elementary Botany for India by Rai Bahadur K. Rangachari, M.A., L.T., Government Lecturing Botanist, Agricultural College, Coimbatore.

(8) The Bases of Agricultural Practice and Economics in the United Provinces by Dr. H. M. Leake, M.A., Director of Agriculture, United Provinces.

(9) Lessons on Indian Agricluture by Dr. D. Clouston, M.A., C.I.E., Director of Agriculture, Central Provinces.

(10) The Story of Rai Sahib Kuluram Kurmi of Pethgaon, by Dr. D. Clouston, M.A., C.I.E., Director of Agriculture, Central Provinces.

In addition, several bulletins of common interest and educational value have been issued by the Departments of Agriculture in various provinces.

(VI) Forestry.

339. The Forest Research Institute and College, Dehra Dun, has twofold activities, firstly research and secondly the training of students of the Provincial Forest Service and Ranger classes. The question of training probationers for the Imperial Forest Service at Dehra Dun is under consideration.

340. During the period under review it was decided to decentralise the training of Rangers, the idea being to have three Colleges, one at Dehra Dun under the United Provinces Government for students from that Province, the Punjab (including North-West Frontier Province), Bengal, Assam and the Northern and Central India States, another at Dharwar for students from the Bombay Presidency and adjacent Indian States, and the third at Coimbatore for students from the Madras Presidency, Bihar and Orissa and the Central Provinces. Owing to the inability of the United Provinces Government to provide the instructional staff and take over the College at Dehra Dun the proposed transfer has been postponed until the 31st March, 1927. Local Governments and Administrations and Indian States, etc., are now charged Rs. 1,750 per annum for each Provincial Forest Service student and Rs. 1,500 per annum for each Ranger student. The Bombay Government were unable to proceed with the Dharwar scheme and at the request of the local Government, the Government of India agreed to train at Dehra Dun for 5 years with effect from the 1st April 1922 up to a maximum of 10 ranger students annually from Bombay. Subsequently the Madras Government found that they were unable to maintain the Coimbatore College on the small number of students from the sphere allotted to that College, and suggested that some arrangement should be arrived at which would ensure that the Dehra Dun College and the Coimbatore College should not compete with each other but should co-operate in imparting Rangers.

the special form of education to which they are devoted, and sanction was accorded to the local Government's proposal that Dehra Dun shall train rangers for the Punjab, North-West Frontier Province, the United Provinces, Bengal and Assam, while the sphere of the Coimbatore College will be Bombay, Central India, Bihar and Orissa, Orissa Feudatory States, Central India States, and the States of Hyderabad, Mysore, Travancore and Cochin. These revised arrangements which will come into force as soon as it is found practicable will be experimental for five years. Rangers for Burma are trained at the Forest School, Tharrawaddy.

Lower Subordinates.

341. The training of Lower Subordinates of the forest service is provided in the various provinces.

Manuals for students.

342. No progress was made in the drawing up of Manuals for the use of students owing to shortage of staff. Mr. R. S. Hole, C.I.E., lately Forest Botanist, who was engaged in the revision of the Botany Manual, has unfortunately been compelled to proceed on leave owing to ill health. The question of having a Manual of Forest Engineering is being considered.

(VII) Veterinary Science.

Scope of the Department's work.

343. The work of the Veterinary Department has expanded steadily, though, owing to financial stringency, several of the sanctioned posts in the cadre of the Indian Veterinary Service, including some at veterinary colleges, have had to be kept vacant. The number of officials recruited in the country, *viz.*, Deputy Superintendents, Inspectors and Veterinary Assistants, rose from 1,210 in 1916-17 to 1,478 in 1921-22 but the latter figure is still below the sanctioned strength which was 1,647 officers in 1916-17.

Colleges and Schools.

344. Education continues to be provided in the four Veterinary Colleges at Lahore, Parel (Bombay), Belgachia (Calcutta), Vepery (Madras) and at the Burma Veterinary School at Insein and a small branch school at Taunggyi in the Southern Shan States. The new four years' English course, leading up to the Diploma of Licentiate in Veterinary Practice, Punjab, was introduced at the Lahore Veterinary College in October 1921. Concurrently with this event there has been a great diminution in the admission of students for the first of the new four-year courses but this is very largely attributed to the absence of military students and students from other provinces and States consequent on the general reduction in military establishments and the financial stringency respectively. The Madras College has been strengthened by the addition to its staff of a third officer of the

Imperial Veterinary Service. A new laboratory and extensions to the College have been constructed. With a view to attracting a better quality of candidate for the college the rate of stipends granted to students has been increased from Rs. 10 to Rs. 15.

345. The total number of students attending the four colleges at the close of the year 1921-22 is 475 against 545 at the close of the year 1916-17. The expenditure has increased from Rs. 3,92,096 to Rs. 6,40,939. The number of those who successfully graduated rose from 541 in the previous quinquennium to 677 in the quinquennium under review.

346. The most important feature of the period is the institution at the Imperial Bacteriological Laboratory, Muktesar, of a two-year trial course for officers of the Provincial Veterinary Service in order to enable them to qualify for promotion to the Indian Veterinary Service. Six men are now undergoing this training. The general scheme for a regular post-graduate training at the Muktesar Institute for officers of this class is now under consideration.

347. In 1921 the first batch of five State scholars was sent to England to obtain the diploma of the Royal College of Veterinary Surgeons and thereby to render themselves eligible for appointment to the Indian Veterinary Service. These scholars are due to return to India in 1925. In view of the financial difficulties it has not been found possible to depute any more scholars to the United Kingdom during the year 1922.

CHAPTER VIII.

INDUSTRIAL AND COMMERCIAL EDUCATION.

(*I*) *Technical and Industrial Schools.*

General.

348. The question whether technological training should or should not form part of the functions of an Indian university was discussed very fully by the Calcutta University Commission. Among the witnesses examined by them there was a considerable number who advocated the segregation of technology from the sphere of the university on the ground that the university training would tend to be too academic and not sufficiently practical. The Commission, however, reached the conclusion that "the training of men for responsible positions in scientific industry is a service which the universities along with other institutions may with advantage render to the community. Moreover the inclusion of practical scientific studies in the curriculum of the institutions which are recognised as giving the highest forms of training for various careers has a beneficial effect upon the educational outlook of the whole people; it may be a corrective to a too exclusively bookish tradition in the secondary schools."[1] The Commission, however, uttered a warning against the assumption by any university of technological training without adequate equipment or a fully qualified staff. The cost of the latter has hitherto precluded any large development in this direction, though courses in applied or industrial chemistry have now been adopted at several universities.

Training abroad.

349. The majority of Indian students who desire higher technological training still go abroad. Up to the year 1921 ten scholarships were awarded annually by the Government of India, one for each major province, to enable students to proceed to England for training in industries. With the introduction of the Reforms these scholarships were, in common with the administration and finance of education, provincialised. Some of the provinces propose to increase the number of their scholars, but the Lytton Committee on Indian Students in England, which sat in 1921, were impressed with the difficulties in the way of providing facilities for practical training for Indian students in the United Kingdom. These difficulties were referred to in the last review. The Lytton Committee recommend that the opportunities for such training in India should be more fully explored.

Higher Technological Institutes.

350. Meanwhile for research into the application of science to industry there is one institution, the Indian Institute of Science at Bangalore founded by the late Sir J. Tata, to which

[1] Calcutta University Commission Report, Vol. V, Chapter XLVIII, p. 192.

has been added during the quinquennium the Cawnpore Technological Institute. The practical side of the research work conducted at the Indian Institute has been developed in recent years. There are now 83 students engaged on such research. The Cawnpore Technological Institute was established in January 1920. It was decided on the recommendation of a representative committee that the Institute should provide training for:—

(*i*) research chemists in general applied chemistry,
(*ii*) technical chemists in oil extraction and refining,
(*iii*) technical leather chemists, and
(*iv*) technical chemists for bleaching, dyeing and finishing textiles.

The course is one of three years.

351. Another important institution of a lower status is the Victoria Jubilee Technical Institute, Bombay. The Institute gives courses in mechanical and electrical engineering, textile manufacture, technical chemistry and plumbing and sanitary engineering. The competition for admission is very great and there are now 314 students on the roll in spite of the fact that fees have been raised to Rs. 50 a year (or Rs. 25 per term). The scope of the work has been extended recently to include lead burning and oxy-acetylene welding, the expression of oils and fats on a small scale and the testing and analysis of cloth and yarns.

Statistics of Technical and Industrial Schools.

352. Finally there are 276 technical and industrial schools in India, 199 for men and 77 for women, attended by 14,082 pupils, of whom 11,400 approximately are men and 2,700 women. Of these 57 are Government schools, 37 are managed by boards and 182 are under private management, all but twenty of them receiving aid from public funds. The following statement shows the cost of these schools in 1921-22.

Expenditure on Technical and Industrial schools, 1921-22.

	Expenditure from				Total expenditure.
	Government Funds.	Board Funds.	Fees.	Other Sources.	
	Rs.	Rs.	Rs.	Rs.	Rs.
Schools for males .	12,89,440	1,85,193	84,921	10,59,297	26,18,851
Schools for females .	60,166	6,900	4,074	1,32,400	2,03,540
Total .	13,49,606	1,92,093	88,995	11,91,697	28,22,391

N.B.—The *Schools of Art* are not included in this table.

Need for a suitable environment.

353. These schools are mostly craft schools. Their success depends on the extent to which they meet a real local demand. The need for an industrial background in the area served by an industrial school is not fully appreciated by many who advocate technical education. These are they who "stand fast in the faith that commerce and industry must flourish if commerce and industry are taught in schools and that employment must follow on the economic blossoming. In reports, in council and in conference we have sought for many years to lay this ghost. Commerce and industries do not start at the bidding of academies. Experience has demonstrated this in the East and in the West. Technical instruction in local institutions for markets which do not locally exist must be expensive and theoretical and futile."[2]

K. E. M. School, Akyab.

354. A striking illustration of the truth of the foregoing remarks is furnished by the brief history of the King Edward Memorial Technical School, Akyab. Founded in 1913 by public subscriptions, its expensive buildings were completed before serious thought was given to subjects for instruction, instructors or pupils. It was maintained by public subscriptions (which eventually fell to thirty rupees a month), the Akyab District Fund and Provincial funds. It provided classes in carpentry, tin-smithing, cane-work and book-keeping, attracted boys by stipends of Rs. 15 monthly and was managed by a local board of directors till July 1921 when they handed it over to the Catholic Mission. Brother Arnold, who had been directing industrial education in America, was sent to take charge of it, but at the end of the year 1921-22 the Mission closed the school. Brother Arnold reports as follows:—"Of all the boys in my charge none had any ambition to study and they were too lazy to work. There has never been one boy of a respectable family in Arakan to attend the school. The boys are all poor, mostly taken off the street and came here only to earn a little spending money. You cannot make a good school with bad material. The school during its entire existence to my knowledge has never turned out one boy of any practical use. I do not know of any school in the world that has devoted such sums of money for the benefit of people who have responded so little. An industrial education for a boy in Arakan is useless because there are no industries. An industrial school must be founded on the industries of a country."[3] The Moulmein Trades School was an even more costly test of the local demand for industrial education but a less effective one because classes were never actually opened. The valuable buildings are now being used for the Government High School.

[2] Assam, pp. 72-73.
[3] Burma, p. 48.

355. Another class of technical school which has not proved successful is the primary industrial schools of the Punjab. These schools were intended to provide for the children of artisans some training in their hereditary occupations combined with a minimum of general education, in short to take the place of premature apprenticeship. It is reported that the technical education they provide is insufficient to secure their pupils paid apprenticeships on leaving while the general education which they give is naturally of a low standard. Punjab Industrial Schools: (a) Primary.

356. On the other hand the middle industrial schools of the Punjab, although they showed little change either in number or attendance, have attained a certain degree of popularity owing to the practical nature of their courses. The most popular subject is carpentry. The courses of study have been transformed. Literary education is not now attempted, six of the eight daily hours of work being given to practical craft and the remaining two to subsidiary subjects such as scale-drawing. Mr. Heath, the Inspector, remarks—"Whatever may be said against stopping general education after the primary stage in these schools, there is one fact which stands out to any observer. This is the very great advance in the quality and the finish of the work, and that notwithstanding many handicaps and the absence of almost every modern aid to good work."[4] (b) Middle.

357. Still more successful is the Railway Technical School at Lahore. Originally founded with the intention of supplying literate apprentices to the workshops of the North Western Railway, this has now become one of its least important functions. It gives an elementary training in carpentry, iron work, mechanical drawing, etc. Those of its students who do not wish to proceed for an advanced course in the Mayo School of Arts easily find employment and consequently it maintains a steadily increasing recruitment. (c) Railway Technical School.

358. Schools of a similar type are found in Madras. During the year 1921-22 there were 38 aided industrial schools in that province, many of them situated in out-of-the-way places. "These assisted schools provide a reasonably efficient form of trade instruction at an extremely low cost to Government."[5] Most important of the industrial schools in Madras is the Perambur Trades School which furnishes an interesting instance of the value of co-operation between the Department of Industries and a large works organisation. The railway authorities provide the building and equipment and arrange Madras Schools.

[4] Punjab, p. 124.
[5] Madras, p. 50.

to send their apprentices in working hours, while the Madras Trades School furnishes the trained staff.

In the Madras Presidency "there is not yet a real industrial atmosphere or an industrial class. Much of the labour used in industry is drawn from agriculture and ready at any time to return to agriculture and the ordinary industrial worker, though performing his own job to the best of his ability, takes little interest in other processes or in the works as a whole. Institutions like the Madras Trades School tend, to an appreciable extent, to create an industrial atmosphere and to stimulate a livelier interest in the mind of the worker in his work and allied occupations."[6] These remarks admit of a general application.

Bengal Schools.

359. Technical schools in Bengal, such as the Kalimpong industrial school, teaching tailoring and gardening, and the Comilla Elliot Artisan School, teaching carpentry and blacksmithing, also show an improved attendance. A site for the Calcutta Technical School has been purchased at a cost of about 8½ lakhs of rupees. It will enable a greatly improved training to be provided for apprentices and others employed in engineering work in or near Calcutta, besides forming the nucleus of a technological institute affording facilities for higher technical training in various subjects. Another step in the same direction is the opening of a school at the Kanchrapara workshops of the Eastern Bengal Railway where educated Indians may take a full course of apprenticeship combined with technical instruction of a higher kind. There is a Board of Control of Apprenticeship Training whose advice is invariably sought in such developments. The railway workshops at Lillooah and Kharagpur likewise provide training facilities for apprentices.

Central Provinces.

360. The Central Provinces report the opening of three new schools of crafts at Jubbulpore (Robertson Industrial School) in 1918, at Chandametta in August 1920 attached to Messrs. Shaw Wallace & Co.'s collieries and workshop, and at Akola. It is proposed to open two more such schools at Itarsi and Raipur when funds become available. The schools train carpenters, black-smiths, fitters, turners, etc.

Bombay Schools.

361. The R. C. Technical Institute at Ahmedabad was founded by the late Sir Chinubhai Madhavlal and taken over by Government in 1917. It is attended by 78 pupils. The subjects taught are spinning, weaving and mechanical engineering. It possesses equipment of a very complete character and is an institution of great potential value to the mill industry of Ahmedabad, for which it is designed to train youths as foremen and overseers.

[6] Madras, p. 47.

B. and O. Schools.

362. In Bihar and Orissa, the Jamshedpur Technical Institute was started by the Tata Iron and Steel Company in 1921. Its object is to train and supply skilled Indians for the various departments of the Company. A fuller account is given in paragraph 431. A scheme for the establishment of the proposed Tirhut Technical Institute at Muzaffarpur is under consideration. The Institute will have mechanical engineering classes for apprentices and industrial classes for artisans.

Assam Schools.

363. The industrial schools in Assam are doing well. The establishment of a School of Handicrafts at Sylhet was sanctioned during the period under review. The Public Works Department are responsible for the administration of such part of the Williamson funds in Assam as is devoted to the training of artisans. The period of apprenticeship is usually of three years. There were at the end of the quinquennium sixteen such apprentices of whom fourteen are practising in railway workshops.

Special Industrial Schools. (a) Weaving.

364. The aforementioned institutions each provide elementary technical training in a variety of trades or handicrafts. For the more important industries of India there are special schools. Such, for example, are the Government Weaving Institutes at Serampur and Benares, and the Saunders Weaving Institute at Amparapura (Burma). The attendance at the Bengal institution which has hostels for the four principal communities rose from 78 to 187 and the cost of maintenance from Rs. 6,000 to Rs. 15,000. Dyeing classes have now been added. A system of Government loans to ex-students for the purchase of improved plant has been instituted and is proving successful, the loans being repaid with fair regularity. Attached to this Institute are six peripatetic centres giving short practical courses in weaving. Through the agency of these centres over five thousand fly-shuttle sleys have been brought into use. At the Benares Institute the technical course extends over three years and follows the syllabus of the City and Guilds Institute, London. The Institute has also a short artisan course and supervises the work of peripatetic weaving schools. There are, in addition, in the United Provinces some district weaving schools maintained partly by Government, partly by local bodies.

The School of Dyeing and Printing, Cawnpore, has attained to a considerable reputation and is one of the centres for the City and Guilds examinations. The examiners in their report for 1920 state that "two candidates at the Government School of Dyeing and Printing, Cawnpore, obtained higher marks than any candidate in the United Kingdom."[7]

[7] United Provinces, p. 112.

"The Saunders Weaving Institute has been a success since its institution about ten years ago because it was set up in a locality where hand-loom weaving was the traditional industry, and because, especially by popularising the flying shuttle, it has enabled hand-loom to complete with power-loom products."[8]

Wood and Leather work.

365. Amongst schools of carpentry may be mentioned the Government Wood-working Institute at Bareilly and the Allahabad Carpentry School which includes classes for training teachers and for British troops.

For leather workers two successful schools are maintained at Cawnpur and Madras. The former has proved so popular that another similar school has now been established at Meerut. The Leather Trades Institute at Madras attracts students from all parts of India. Of the 68 students four were from Delhi, eight from the Punjab, four from Kashmir, two from the United Provinces and several from Indian States.

Control.

366. With the transfer of education in 1921 the control of industrial schools was in most provinces entrusted to the Department of Industries. The distribution of work between the Education and Industries Departments varies in the different provinces. In Bombay, to quote one example, the control of industrial schools is in the hands of the Director of Industries while that of technical schools is entrusted to the Education Department, working through a Committee of Direction. This Committee consists of seven members including the Directors of Industries and Public Instruction and the Principal of the Poona College of Engineering. The Committee recognises technical schools, recommends grants to be paid by Government, regulates the courses and standards of education and arranges for their periodical inspection and examination. It is reported that the certificates awarded by the Committee are held of considerable value as qualifications for securing employment in industrial firms, railway companies, etc. The position in most provinces is that some forms of technical training are controlled by the Department of Industries, some by the Public Works Department, some by the universities, while with the development of vocational courses in secondary schools and intermediate colleges an increasing amount of such training will be provided in institutions under the control of the Education Department. "The urgent need of the hour is to co-ordinate the work which is controlled by such a variety of authorities and to evolve some definite policy based on the acceptance of a few general principles."[9]

[8] Burma, p. 48.
[9] Punjab, p. 126.

(II) Schools of Art, 1921-22. Statistics.

Schools.		Pupils.	Expenditure from			Total expenditure.
			Government and Board Funds.	Fees.	Other Sources.	
			Rs.	Rs.	Rs.	Rs.
The School of Arts, Madras	1	234	74,730	13	7,956	82,699
Sir J. J. School of Art, Bombay . . .	1	343	1,20,751	5,594	2,187	1,28,532
Schools of Art, Bengal .	4	424	48,929	6,327	8,888	64,144
The School of Arts and Crafts, Lucknow .	1	106	52,310	1,332	6,866	60,508
The Mayo School of Arts, Lahore . . .	1	225	80,796	1,471	..	82,267
INDIA .	8	1,332	3,77,516	14,737	25,897	4,18,150

367. There are five Government Schools of Art, situated at Calcutta, Madras, Bombay, Lucknow and Lahore: there are also two small aided schools and one unaided school in Bengal. The name given to these schools is somewhat misleading. Although they all include departments of art in the narrowest sense of the word, *i.e.*, of drawing and painting, their activities are chiefly devoted to the encouragement of Indian industrial art and its application under modern economic conditions. A very full and interesting account of these activities was given in the last quinquennial review. These institutions are, if any such generalisation is permissible, essentially schools of applied design. In this work they have been eminently successful. "There is no denying the fact," says the Director of Industries in the United Provinces, "that the School of Arts and Crafts has been responsible for the dissemination of thousands of improved designs."[10] In the past the art schools were much criticised for a want of vitality and definite objective. There was a mistaken idea that by the mere copying and reproducing of beautiful objects of traditional Indian art, the art could be re-vitalised and the demand for such objects revived, quite irrespective of the question whether such objects met the natural requirements of the people or were valued merely for their good workman-

[10] United Provinces, p. 110.

ship and as objects of curiosity. The pattern books of the past did much to foster this idea. As a record they are excellent as also was the old Art Journal, but as a means of developing and guiding Indian art upon lines suited to the demands of the country they were both useless.

General conditions.

368. The schools are developing each on its own lines influenced largely by the local environment. The Calcutta School has been instrumental in creating a school of Indian painting the reputation of which now extends beyond the confines of India. The Lahore School is essentially a school of arts and crafts, for the Punjabi is by nature a skilled craftsman but owing to his inland position he has been little influenced by the development of designs to meet modern requirements, hence his creative work has tended to become stereotyped and without vitality. Of the influence on art of environment the Principal of the Sir Jamsetjee Jeejeebhoy School of Art, Bombay, writes an interesting memorandum from which the opening paragraph is quoted:—"In considering the growth and progress of art in Bombay during the past five years one cannot but be struck by the fact of the unusual possibilities offered by the city in this connection. Its situation is beautiful and inspiring; its bazaars teem with varied colour; its crowded streets are thronged with probably the most classical figures in the world; its wealth is more than sufficient to sustain a civic patronage of the Fine Arts equal to that of Mediæval Florence and its population are on the whole of a frank and open-minded character naturally inclined to progress and to the assimilation of ideas. The city is renowned, if not for the subtlety of its intellectual achievements, at any rate for its abounding vitality, its dislike of sham, and its bold hold upon realities. The cause of these stirring qualities is doubtless deep-rooted in geographical, historical, and physiological conditions into which it would be a digression to enter here, but which have collectively persuaded many knowledgeable observers that the omens in Bombay are favourable and perhaps uniquely so, to a revival of the Fine Arts in India."[11] Special attention has been paid in the Bombay School since the appointment of the new Principal, Captain Solomon, in 1920, to the art of mural decoration. This work received generous encouragement from His Excellency Sir George Lloyd. The mural paintings on the walls of the Art School executed by the staff and students have excited much public interest and attracted thousands of visitors. It is possible to foresee a great future for this revival of one of the most ancient forms of Indian art.

[11] Bombay report.

369. How wide a range of subjects is undertaken by these schools may be illustrated from the following figures of the Bombay School. Of the 343 students 141 are in the Reay Workshops, studying various handicrafts, such as pottery, wood-work, brass-work, etc., 35 learn drawing, 65 painting, 24 modelling, 19 attend the course for drawing teachers and 59 attend the architectural course. The Public Works Department Reorganisation Committee was so much struck by the potentialities of the last course that they recommended its development into a complete course for the training of architects. Financial stringency has so far prevented the adoption of this recommendation. Subjects of study.

370. The Mayo School of Arts, Lahore, also opened during the quinquennium a class for architectural draftsmen under the supervision of the Government Architect. The school was provided in 1921 with an excellent hostel to which a study room, workshop and playing fields are attached. The class for drawing masters for secondary schools meets a practical need and its ex-students are much in demand in the Punjab and in the neighbouring provinces.

371. There appears to have been some danger of this side of the school work being over-emphasised in the School of Arts and Crafts, Lucknow, for Mr. A. C. Chatterjee reviewing the position said "with regard to the status of the school the first principle is that it is not to be a seminary for drawing masters, the second principle is that it shall be primarily a seminary of design and the third principle is that work must be manual and not done by machinery."[12] This passage summarises the conclusions of an expert committee which examined the working of the school and defined its functions. A similar committee was appointed towards the close of the quinquennium to re-organise the work of the Madras School of Art. Its proposals are now being considered by the Madras Government.

(III) Commercial Education. Statistics.

(a) Colleges and Schools of Commerce.

	Institutions.		Scholars.	
	1917.	1922.	1917.	1922.
Colleges	3	5	416	421
Schools	67	134	3,311	7,090
Total	70	139	3,727	7,511

[12] United Provinces, p. 110.

(b) Expenditure on Colleges and Schools of Commerce.

Expenditure.	Colleges.		Schools.	
	1917.	1922.	1917.	1922.
	Rs.	Rs.	Rs.	Rs.
From Government Funds . .	40,015	60,581	37,479	69,747
„ Board Funds . . .	..	..	1,507	4,108
„ Fees	46,145	35,932	82,935	1,69,869
„ Other Sources . .	6,196	2,555	16,729	75,096
Total .	92,356	99,068	1,38,650	3,18,820

372. The foregoing table shows a remarkable increase in the number of institutions providing training for commerce and in the number of students under training. The numbers are even more striking when contrasted with the figures of ten years ago which showed 28 schools of commerce with some 1,500 pupils. It must, however, be admitted that the majority of these commercial institutions consist of little more than classes in shorthand, typewriting and accountancy attended by clerks out of business hours and conducted by the Young Men's Christian Association or as commercial enterprises. Still the public demand for the provision of some higher form of commercial education has strengthened during the quinquennium. In some places it has anticipated the economic demand, having originated rather from a desire for employment and from a mistaken assumption that the supply of men trained in commerce will create commercial openings than from any active demand on the part of the commercial community. The products of some of the recently opened commercial institutions have found at times difficulty in obtaining suitable employment.

Degrees and diplomas.

373. Degrees in Commerce (B. Com.) are awarded by the universities of Bombay, Lucknow and Mysore and diplomas in Commerce by the universities of Allahabad and the Punjab. Elsewhere commercial students who complete their courses (many of them leave after acquiring some skill in typewriting to obtain immediate employment) sit either for examinations conducted by official boards as in Madras and Bengal or for those of the London Chamber of Commerce.

374. The most important commercial institution in India is the Sydenham College of Commerce, Bombay. Its aim is to furnish young men embarking on a business career with a university education of such a kind as will assist them to rise to responsible and important positions, and at the same time to promote the study of social conditions by means of specialised courses in economic science. It teaches a four years' course leading to the B. Com. degree of the Bombay University. The number of students admissible is restricted by the staff and accommodation available; the enrolment is between 240 and 250 but the number of applications for admission in one year exceeded five hundred. The College has already established its reputation and its graduates are able to command higher salaries for their services than the ordinary graduates in Arts. "Practically all the students who graduate from this College find suitable openings at salaries varying from Rs. 100 to Rs. 200 per mensem soon after their results are declared and some of them within a few years are able to earn as much as Rs. 400 to Rs. 500 per mensem."[13] In view of the demand for admission it is satisfactory to learn that the Bombay Government are making arrangements to allot enlarged premises to the College. It is hoped also to open a course in Actuarial science and another in Railway transport. Sydenham College of Commerce, Bombay.

375. Next in importance is the Institute of Commerce, Madras, which is intended to train men to qualify as auditors under the Indian Life Assurance, Provident Assurance and Companies Acts. It is also intended to prepare men for responsible positions in commercial undertakings. The Institute at present occupies rooms in the Law College but a site has been selected for a permanent building. Both at Bombay and Madras the Provincial Government is assisted in the management of the college and institute by a council containing representatives of the commercial community. Other institutions which deserve mention are the Government Commercial Institute, Calcutta, the School of Commerce, Calicut, and the Institute of Commerce, Lahore. The majority of the students trained in these schools secure employment in clerical posts in Government or private service. Institute of Commerce, Madras, etc.

376. The Accountancy Diploma Board of Bombay constituted at the instance of the Government of India held its first examination in 1918. It now holds examinations simultaneously at Bombay, Madras, Calcutta and Allahabad. Of 223 candidates who appeared during the quinquennium only 48 passed and of these only 27 satisfied the Board in the matter of practical training in accounts. The successful candidates Accountancy Diploma Board.

[13] Bombay report.

secured diplomas qualifying them to practise as auditors under the Indian Companies Act.

Teaching of commercial subjects in ordinary schools.

377. Some commercial subjects usually confined in practice to shorthand, typewriting, book-keeping and commercial geography are included among the alternative courses leading up to School-Leaving Certificates. These subjects are taken during the last two years of the high school course by some of the students who do not propose to proceed to the university, for a pass in these subjects does not qualify for matriculation. This experiment in vocational education would be more successful if the boys did not labour under the disadvantage of an imperfect knowledge of colloquial English, which detracts considerably from their proficiency in such subjects as shorthand. The Calcutta University Commission recommended the inclusion of commercial departments in the intermediate colleges which they wished to see established and, whether such colleges come into being or not, it is probably at the intermediate stage that vocational education of this kind should prove most successful.

CHAPTER IX.

EDUCATION OF SPECIAL CLASSES AND COMMUNITIES.

(i) *Education of Chiefs and Higher Classes.*

Institutions.

378. For the education of the sons and relatives of the chiefs and princes of India, whose families rule over one-third of the continent, five Chiefs' Colleges are maintained. These colleges are:—

	Number of pupils.
Mayo College, Ajmer, for Rajputana Chiefs. . . .	99
Daly College, Indore, for Central India Chiefs . . .	51
Aitchison College, Lahore, for Punjab Chiefs . . .	95
Rajkumar College, Rajkot, for Kathiawar Chiefs . .	53
Rajkumar College, Raipur, for Central Provinces and Bihar and Orissa Chiefs.	64
	362

The college at Raipur, which had previously possessed a somewhat non-descript status, was admitted to the full rank of a Chiefs' College in 1921.

Their general character.

379. In point of buildings, staff, and organisation these institutions approach much more nearly to the English Public Schools than to the ordinary Indian high schools. The buildings, which have been erected mainly from contributions given by Indian princes, are from an artistic point of view among the most notable educational buildings in India, though from a scholastic point of view it must be admitted that they are in some respects defective, for example in the accommodation for science teaching. They are situated in beautiful grounds, which provide ample space not only for the ordinary school games but also for polo. The hostels allow a separate room for each pupil or for any two pupils of the same family.

The staff of each college includes at least two European masters of the type usually employed in English public schools in addition to a strong body of Indian masters. The classes are consequently small and much individual attention can be devoted to the scholars.

Courses.

380. The colleges prepare for a special diploma examination, corresponding approximately to the matriculation in standard, conducted by the Government of India: in the case of the Mayo College older pupils also prepare for a further or post-diploma examination, which is at least equivalent to the

degree examination of an Indian university. It is perhaps misleading to describe the colleges as preparing for these examinations, for the position and outlook of the students, the quality of the teaching and the traditions of the colleges prevent the unnatural domination of the examination over the work of the masters and boys, which is so unsatisfactory a feature of the ordinary high school. The institutions are entirely residential and a great feature is made of the out of school life of the pupils. The results are evident not only in the excellence of the students at games but also in the quality of their manners.

Effects of the War.

381. The colleges suffered severely from the war, as the majority of the European members of the staff joined the Indian Army Reserve of Officers and served in various campaigns. The Daly College, Indore, in particular, was affected, for it was decided in 1918 to take advantage of an offer made by its Council and use the college as a preparatory school for Indian officers. Of the scholars of the Daly College some went to the Mayo College, Ajmer, and some returned to their homes. The college was re-opened after the war and is now recovering its numbers.

Finance.

382. The colleges further suffered after the war from the prevailing financial stringency. It was necessary to raise the pay of the staff, both European and Indian. The Government of India was not in a position to increase its grants to the colleges. Indeed it has in some cases reduced them. The additional expenditure had to be met from fees and subscriptions. The fees have been raised at all the colleges, but even now they form but a small proportion of the expenses of a boy attending a Chiefs' college. The highest fees, for example, for ordinary pupils are charged at the Aitchison College, Lahore, Rs. 75 a month; but it actually costs a boy from Rs. 2,000 to Rs. 3,000 a year to live at this college and this is not an exceptional figure.

Other institutions.

383. Among provincial institutions for the education of higher classes are a school for the sons of Shan chiefs in Upper Burma, the Colvin Taluqdar's School at Lucknow for the sons of the landed gentry of Oudh, and the Queen Mary's College at Lahore for the education of girls of good family. Of the Colvin School it is said that the pupils had in the past little incentive to work "but present developments have opened dignified careers in politics, in the army and the civil services, while the evolution of new social and economic conditions demands the attention of landlords to the management of their own estates."[1] Queen Mary's College has prospered under Miss Walford and now has an attendance of 89 girls.

[1] United Provs., p. 132.

The Court of Wards' School at Newington, Madras, was closed in 1919 after the murder of the principal, Mr. de la Hey. Hastings House School, Calcutta, was also closed for lack of support.

(*ii*) *European Education.*

Distinction between European and Indian Schools.

384. European schools in India, although included in the general system of public instruction, form a class by themselves. They owe their origin partly to the need of the European community domiciled in India for schools in which the teaching is conducted throughout in English, partly to the desire of the community to maintain a distinctively European character in the instruction and training given to their children. These schools, though controlled by provincial governments, have many common ties. They are governed by a single all-India code of regulations; provincial governments are at liberty to modify this code to suit local conditions and have in fact introduced a number of local modifications, but in their essential features European schools are not subject to the provincial variations which affect Indian schools. Most of them prepare their pupils for a single series of public examinations—the Cambridge Locals: many of them, the hill schools in particular, draw their pupils from different, sometimes remote, parts of India.

385. The distinctive character of European education has been recognised in the rules framed under the Government of India Act, which provide that European education shall be a "reserved" subject under the control of a Member of Council and not a "transferred" subject under a Minister responsible to the elected legislature.

Management.

386. Although Government maintains a few schools, of a special character chiefly designed for the education of the children of British soldiers who are serving or have served in this country, the majority of the European schools in India are under private, usually denominational, management. In the Bombay Presidency, for example, there are in all 87 institutions of which 82 are aided: of these 45 are managed by Roman Catholic Missions, 16 belong to the Church of England, 5 are managed by other Protestant Missions, one is a Jewish school and the remainder, including ten railway schools, are undenominational. Of the undenominational European schools in India the majority are managed or aided by the railways. The East Indian Railway, for example, besides supporting one hill school (Oak Grove at Mussoorie) maintains twenty-one schools and aids seven other local schools for Europeans in the plains. (The same Railway maintains or aids ninety-two schools for their Indian employees.)

Classification.

387. Although European schools are alike in their general organisation, they are, like Indian schools, classified into high, middle and primary; but the difference in their case between the grades is one of degree and not of kind. A primary school which contains a small number of senior pupils who have passed the primary stage (and there are many such schools catering for the needs of small isolated European communities in the plains) is for statistical purposes classified as a middle school. This accounts for the fact that of 385 schools for the general education of Europeans 283 are classed as secondary, although of the 42,000 children in attendance nearly 30,000 are in the primary stage. In the same way the four arts colleges for Europeans are in fact nothing more than high schools to which post-matriculation classes have been added. This explanation is needed for the proper understanding of the following tables:—

Statistics.

(*a*) *European Schools with Scholars, 1921-22.*

Institutions.	Colleges.		High Schools.		Middle Schools.		Primary Schools.		Special Schools.		Unrecognised Schools.		TOTAL.	
	Institutions.	Scholars.	Institutions.	Scholars.	Institutions.	Scholars.	Institutions.	Scholars.	Institutions.	Scholars.	Institutions.	Scholars.	Institutions.	Scholars.
For males	2	488	65	12,166	52	5,653	46	2,312	17	909	1	20	183	22,048
For females	4	358	88	13,081	78	7,669	56	2,326	35	638	..	..	261	24,572
TOTAL .	6	846	153	25,247	130	13,322	102	5,638	52	1,547	1	20	444	46,620*

* Of these 41,782 are Europeans and the rest belong to other communities.

(*b*) *European scholars according to stages of instruction, 1921-22.*

Scholars.	Collegiate Stage.	High Stage.	Middle Stage.	Primary Stage.	Special Schools.	Unrecognised Schools.	TOTAL.
Males . .	355	1,776	4,899	14,897	1,020	40	22,987
Females . .	195	1,279	4,396	14,851	907	23	21,651
TOTAL .	550	3,055	9,295	29,748	1,927	63	44,638†

† This includes 2,856 European scholars reading in institutions for Indians.

388. In 1916-17, there were 7 colleges, 150 high, 142 middle, 97 primary, 48 special and 2 unrecognised schools, with a total enrolment of 42,621, of whom 39,530 were

Europeans. (The details will be found in the supplemental tables in Vol. II.)

The decrease in the total number of secondary schools is due to the adoption of a policy of concentration, which will be described later.

389. European education presents a number of interesting problems some of which were discussed at a conference held in Simla in 1912; an account of this conference was given in the last quinquennial review. Many of these problems are still unsettled, while others have arisen since the introduction of the constitutional reforms. Before considering them I subjoin a table showing the expenditure on European education and the sources from which it is derived. Expenditure.

Expenditure on recognised institutions for Europeans.

Year.	Expenditure from				Total Expenditure.
	Government Funds.	Board Funds.	Fees.	Other Sources.	
	Rs.	Rs.	Rs.	Rs.	Rs.
1921-22 .	46,70,968	21,653	49,06,770	36,73,835	1,32,73,226
1916-17 .	36,46,883	27,908	33,41,183	25,87,214	96,03,188

390. The outstanding feature of the above table is the very high proportion of the cost (about 65 per cent.) which is met from fees and from private sources. The corresponding figures for Indian education are as follows and show that only 35 per cent. of the total expenditure is met from fees, etc. Fees.

Expenditure on recognised institutions for Indians.

Year.	Expenditure from				Total Expenditure.
	Government Funds.	Board Funds.	Fees.	Other Sources.	
	Rs.	Rs.	Rs.	Rs.	Rs.
1921-22 .	8,55,59,060	2,47,09,497	3,31,01,878	2,71,09,308	17,04,79,743
1916-17 .	3,55,15,970	2,22,89,710	2,85,29,955	1,69,44,245	10,32,79,880

Fees.

391. It is satisfactory to note that, when the cost of European education rose in company with the general rise in prices after the war, the greater part of the additional expenditure was met by the community itself in the shape of increased fees. While the cost to Government of each European scholar rose from Rs. 81 to Rs. 103 the average fee paid for each scholar rose from Rs. 80 to Rs. 108. In Bombay and in the Punjab the appreciation of the fee rates is phenomenal; in Bombay the cost to Government of each scholar fell from Rs. 101 to Rs. 100 while the average fee rose from Rs. 68 to Rs. 124; in the Punjab, Government expenditure fell from Rs. 195 to Rs. 190 per scholar, while the average fee paid rose from Rs. 113 to Rs. 241. The fee charges are of course greatest in hill schools, where they amount to about Rs. 40 or Rs. 50 a month. For example, in the St. Paul's School at Darjeeling the fee for boarders is from Rs. 75 to Rs. 80 and for day boys from Rs. 30 to Rs. 40; in the Bishop Cotton School, Simla, the fee for boarders is Rs. 50, and for day boys Rs. 16.

A partial explanation of the comparatively large fees charged in European schools is to be found in a difference in the hostel systems of Indian and European schools. A boarder at an Indian school pays at the most a small charge for his accommodation and makes his own arrangements for his food; a European boarder pays an inclusive fee to the school which, in accordance with the ordinary English practice, provides him with both board and lodging, sometimes also with clothing. About half of the amount included under the head of fees in the table for European schools represents boarding charges.

Hill Schools.

392. It will be deduced from this fact that many of the European scholars are boarders. This is the case. European schools fall roughly into three categories. There are first the hill schools situated at centres such as Simla, Murree, Mussoorie, Darjeeling and in the Nilgiris. Every European parent will, in the interests of his children's health, send them for education to a temperate climate if he can afford to do so; the more well-to-do send their children to England; the majority have to be content with sending them to schools in the hills. Consequently many of the hill schools are very crowded and some of them have long waiting lists. The schools have done their best to expand to meet the demand. During the past five years the Dow Hill and Victoria schools at Kurseong have adopted extensive building alterations, including new dormitory buildings estimated to cost over five lakhs, towards which Sir Percy Newson made a munificent donation of two lakhs. At Simla, the Auckland School for Girls has provided itself with a fine new building

and the Ayrcliff High School has purchased new premises. The Boys' School at Ghoragali has been completely rebuilt. The S. P. G. Mission is opening two large boarding schools at Ranchi, one for boys and one for girls, the buildings of which are estimated to cost 3½ lakhs.

"In 1921 the Lahore Diocesan Board of Education adopted a comprehensive policy, not yet carried to completion, of transferring all but primary schools to the hills. In pursuance of this policy the boys were sent from Lahore to the Lawrence School at Ghoragali; all the girls to St. Denys' School at Murree."[2]

Another striking illustration of the preference of European parents for hill schools is the action taken by the Bombay Educational Society, which has acquired a fine site at Deolali and proposes to move to that spot the large boarding schools which it at present maintains in Bombay. "The whole scheme involving the transfer of 500 boys and girls from the fever-stricken atmosphere of Byculla to the upland breezes of the plateau is fraught with enormous advantages to the domiciled community."[3]

393. Towards the close of the quinquennium the Secretary of State sanctioned the provincialisation of the Lawrence Memorial School, Ootacamund. This school is designed primarily for the orphans and children of British Officers and soldiers who are serving or have served in India. It is under a managing committee composed largely of military officers. Under the new arrangement the Government of Madras will assume full financial control and responsibility for the institution in return for certain grants which the Government of India have agreed to make for its support.

Concentration of schools in the plains.

394. Even if the accommodation at the hill schools were not limited, there must still remain a demand for European day schools in large centres of population in the plains. Some of these schools such as La Martinière schools at Calcutta and Lucknow and the Doveton schools at Madras have established fine traditions. But the need for concentration of effort with a view to the economy of resources is everywhere felt. In Madras the question is pressing, but hitherto sectarian and social differences have stood in the way of a solution. These obstacles have fortunately been overcome in Bombay, where the amalgamation of the Indo-British with the Bombay Educational Society's schools was effected in 1921 and subsequently the authorities of the Cathedral schools, the Bombay Scottish Educational Society and the Bombay Educational Society have decided to pool their assets

[2] Punjab, p. 134.
[3] Bombay report.

and work with a combined staff. "The religious difficulty has been solved by allowing each religious body freedom to give religious instruction to the pupils on Presbyterian or Anglican lines according to the parent's wishes."[4]

395. A third class of European schools are those situated at small centres on the plains, such as railway junctions, where there may be a group of European subordinate officials with their families. In this case too concentration is possible and has in some cases been achieved. The North Western Railway, for example, has adopted this policy. "Hitherto there has been a certain number of small schools in remote places generally maintained or assisted by the Railway authorities; and these can neither be staffed nor maintained in such a way that discipline and teaching would ordinarily be satisfactory. Many of these have been closed; and the Railway has provided a liberal system of scholarships by which its employees can send their children to schools in the hills."[5]

Admission of non-Europeans.

396. In order to obtain admission into a European school it is not necessary that a child shall be born of parents wholly or even partially European. The term 'European' as used for educational purposes has a wide extension. Amongst the *quasi*-Europeans, for example, are the Armenians, who are admitted freely to European schools on the strength of a charter granted by the East India Company according the community equal rights and privileges with the English *in perpetuo*. Besides admitting those whose claims to be regarded as Europeans are doubtful, European schools have always been open to a certain number of non-Europeans. The maximum number of non-Europeans admissible to any school was originally fixed by the European School Code at 15 per cent. of the enrolment. A school with a higher percentage of non-Europeans on its rolls ceased to be classed as a European school. In accordance with the powers vested in local governments to modify the provisions of the code this percentage has been relaxed in some provinces, for example in Bombay, where it has now been raised to 20 per cent. or in the case of a few exceptional schools to 33 per cent. The object of the original provision in the code was to permit the admission to European schools of the children of those well-to-do Indians, who desired to provide their sons with an education more approximating to that of an English secondary school than that obtainable in an Indian high school. The concession has been valued and a general relaxation of the percentage up to 25 per cent. has been advocated. If, as some urge without sufficient consideration, there is no restric-

[4] Bombay report.
[5] Punjab, p. 134.

tion placed upon the admission of non-Europeans into European schools there is a risk that in time the schools may lose their European character. In this event they would neither satisfy the needs of the community in whose interests they were founded (and in some cases endowed), nor would they continue to attract the class of Indian pupils who now attend them. On the other hand, there is an increasing number of non-European families whose habits are such that their children are more at home in European schools. In some parts of India "the attempt to subdivide our educational system into two sub-systems—Indian and European—based on purely racial distinctions has largely broken down; there is a steadily increasing pressure for the admission of non-Europeans which many think it desirable to encourage, regarding habits of life rather than difference of race as the proper basis of organisation."[6] Actually the question is of academic rather than of practical interest. It is very rare for European schools to contain the full percentage of non-European children admissible. Caste and custom prevent much advantage being taken of the boarding schools: few Indian parents are prepared to pay the high fees charged for tuition in European schools: still fewer have children qualified to receive instruction from the lowest stage through the English medium. There are moreover many Indian parents who doubt whether such complete anglicisation is the best preparation to fit an Indian boy for his future environment.

The Cambridge 'Locals.'

397. Every phase of Indian education has its examination problem and European education is no exception to the rule. The subject was discussed in the last Quinquennial Review. The point then and still at issue was the relative merits of provincial examinations conducted by departments of education and the Cambridge Local examinations. The latter have been adopted as standard examinations in most provinces. The chief merit claimed for them is the general recognition accorded to them throughout the world. This argument has received negative support from the disrepute into which for various causes some departmental examinations had fallen. It would have more force if any appreciable number of children reading in European high schools intended to leave India for further study. Educationally there is very little to be said in favour of the substitution of the Cambridge Locals for departmental examinations. The Cambridge examinations are not merely external, omitting all practical tests or reference to the school records, they are positively alien to those children to whom India is, through birth or adoption, home. They cannot of course make India the

[6] Bengal, p. 71.

starting point in such subjects as history and geography; they ignore Indian money, weights and measures and those Indian vernaculars which they accept as optional subjects are treated as dead languages.

Departmental Examinations.

398. The unsuitability of the Cambridge examinations was realised by the Association of European Headmasters who proposed that the Government of India should conduct an all-India examination for European schools. There is much that is attractive in this proposal. Unfortunately the provincialisation of education under the Reforms did not easily permit of its acceptance. Meanwhile, steps have been taken to improve the departmental examinations. For example, in the Central Provinces with the object of making the examinations less external a board has been formed, consisting of the Director of Public Instruction, two non-official members representing the Protestant and Roman Catholic schools, the Inspector of European schools and the Inspectress. The Board appoints examiners, moderates question papers and decides results in which not only the marks obtained in the written examination but also the conduct and record of school work of the pupils are taken into consideration.

399. With the development of school-leaving certificate examinations in which provision is made for such optional subjects as English history, French and Latin for boys and domestic economy for girls, the time may not be far distant when the need for a separate examination for European schools will be less obvious. The change is likely to be hastened by the increasing tendency of Anglo-Indian youths to proceed to Indian universities.

Collegiate education.

400. Even at the Conference of 1912 it was realised that the community was behindhand in the matter of collegiate and professional education. The temptation offered by the high rates of pay obtainable by a lad who has passed the Senior Cambridge examination has in the past lured most Anglo-Indian boys straight from school to work. The introduction of representative forms of government and the adoption of a policy of Indianisation in the public services revealed the fact that, in spite of the considerable annual output from European high schools, the number of Anglo-Indians qualified for admission to the superior services or capable of representing the community in public life was woefully small. A proposal to found a separate university or college for the domiciled community, which found favour in 1912, met with no support from any authoritative quarter. Even if there had been means to found and endow such an institution it would only have served to accentuate the distinction between the education of Europeans and Indians in this country. The

orientation of European education has been profoundly affected by recent political developments. The leaders of the community increasingly realise that the future of the Anglo-Indian youth lies in India and that if Anglo-Indians are to compete on equal terms with other Indian communities they must avail themselves of the opportunities for higher education afforded by Indian universities. The recognition of this fact has led to the foundation in Lahore of a hostel named after the Revd. Oswald Younghusband, to whose labours it was due, for the Anglo-Indians attending the Punjab University. Its effect should be "to bring the community into closer and therefore happier relations with Indian students."[1]

As the Calcutta University Commission point out, "it is desirable that, intending as they do, to earn their livelihood in India, these younger members of the European domiciled community should be brought into association, during the years of their University and Technological training, with the young Indians with whom afterwards they will be brought into association in business or in other ways."

School attendance.

401. Although so few European boys proceed to a degree or enter the liberal professions, the great majority of European children attend school for some years. The suggestion made by the Conference of 1912 that education should be compulsory for European children in India was rejected on the ground that it was unnecessary. In Madras, to cite a single instance, of a total Anglo-Indian population of 23,481 at the last census no less than 8,889 or 37·8 per cent. were attending school. In spite of a fall of 10 per cent. in the Anglo-Indian population in Madras during the last five years there has been a rise of eight per cent. in the number of Anglo-Indian pupils.

Curricula.

402. The curricula both for boys and girls have been modified in the Punjab and in Madras by the introduction of practical subjects such as domestic economy and manual training. Unfortunately neither the accommodation available in hill schools nor the funds at the disposal of school managers allow for any general provision for science teaching. In other subjects the standard of work is reported to have improved. The advance may be ascribed to an improvement in the quality of staff in which the percentage of trained teachers rose from 49 to nearly 55 out of 3,700. In order to attract teachers and to meet the increased cost of living the pay of the European school staff has been considerably enhanced.

Staff.

[1] Punjab, p. 135.

The United Provinces scale introduced in 1921 may be taken as typical:—

	Assistant masters. Rs.	Assistant mistresses. Rs.
High school trained . .	150—10—250	100—5—150
Intermediate . . .	175—10—275	110—5—160
B.A.	225—10—325	170—$\frac{1}{2}$—245

The schools and the War.

403. European schools are now recovering from the effects of the War. "In the boys' schools many masters offered themselves for service and there was difficulty in replacing them. In some instances it was possible to get disabled military officers; more often the teaching, as in England, was given to women. Otherwise the men who remained had to bear the burden of extra work.....There is one beneficial result of the War. By service and sacrifice old boys and masters have created lasting traditions, that will wake responses in the hearts and lives of generations of scholars."[8]

(iii) Muhammadan Education.

Numbers.

404. Approximately one-fourth of the inhabitants of British India profess the Muhammadan religion. Of these sixty million Muhammadans about two millions are in school. The following statement shows that the increase in the number of Muhammadan scholars has just kept pace with the growth of the Muhammadan population in British India.

Muhammadan Scholars and Population.

Year.	No. of Muhammadan scholars.	Percentage of Muhammadan population to total population.	Percentage of Muhammadan scholars to Muhammadan population.	Percentage of Muhammadan scholars to total scholars.
1921-22 . . .	1,966,442	24·1	3·3	23·5
1916-17 . . .	1,824,364	23·5	3·2	23·2

Causes for backwardness.

405. The community has still much lee-way to make up before it reaches the educational level of the Hindus. There is no difficulty in assigning reasons for its backwardness. To the

[8] United Provs., p. 128.

Muhammadan parent religious education is of far more importance than secular; indeed, to many old-fashioned Muhammadans, more especially to the mullas, secular education is regarded rather as a hindrance than a help to religious instruction. (In Burma the force of their opposition is still strongly felt.) Even those Muhammadan boys who do attend secular schools have first to undergo religious education. Hence many start their secular education late. Moreover, the influence of the antique methods of instruction practised in the *Koran* schools affects their secular studies. (One of the first lessons that the small ex-student of the *maktab* must learn is to read without swaying the body to and fro.) This influence has been corrected, to some extent, by the opening of Islamia schools, staffed by qualified teachers, which provide both secular and religious instruction.

A second cause for the backwardness of the community is to be found in the fact that the bulk of the Muhammadan population belongs to the agricultural classes. This is specially the case in Eastern Bengal and the North West of India. In these regions the spread of education amongst Muhammadans is often synonymous with the spread of education in rural areas.

406. Again, when Urdu is not the local vernacular the problem of Muhammadan education is complicated by the desire of the Muhammadan parents to have Urdu taught to their children in school. This difficulty is not felt in the United Provinces, in the Punjab and in the North-West Frontier Province, where Urdu is one of the recognised media of instruction in the ordinary primary school. But in the Bombay Presidency proper[9] the problem of teaching two vernacular languages in the primary stage has required careful consideration. At the request of the community the Bombay Government introduced two special sorts of Urdu standards for Primary schools in 1918; in the one the medium of instruction is Urdu, the local vernacular being taught as a second language; in the other, the medium is the local vernacular and Urdu is a second language. Of 840 Urdu primary schools in the Presidency proper 505 have adopted the former system and 335 the latter. In Burma one deputy inspector reports that the future of Urdu " is not all dark, symptoms of its progress seem looming on the horizon. Urdu which was quite Greek to the people here some five years back has now become a *lingua franca* in the Mandalay bazar. It is hoped that in a very short time it will be a home language among the Muhammadans here."[9] The language problem.

407. The special difficulties attending the early education of young Muhammadans are reflected in the percentages of

[9] Burma, p. 71.

scholars of different communities who reach the higher stages of education.

Percentages of scholars in the different stages of instruction.

Scholars in—	1916-17.		1921-22.	
	Muhammadans.	All other communities.	Muhammadans.	All other communities.
College stage . .	0·3	0·9	0·4	0·8
High stage . .	1·8	3·0	1·5	3·0
Middle stage . .	3·5	5·3	3·7	5·6
Primary stage . .	78·1	82·6	81·8	82·5
Special schools . ..	3·6	1·3	2·1	1·4
Unrecognised schools .	12·7	6·9	10·5	6·7
TOTAL .	100·0	100·0	100·0	100·0

Signs of progress.

408. In the long run the increased attendance in the primary stages must affect the number in secondary schools, more especially since the community is now alive to the need for higher education.

Of the Rawalpindi Division of the Punjab, for example, which shows a phenomenal increase of 65·2 per cent. in the attendance of Muhammadans at school, the Inspector writes: "The Great War had a stimulating effect on the people; the military scholarships have brought a number of boys, almost all Muhammadans, to school; and, more important than these as an impetus to education, are the new prospects in military service offered to people of military classes, who in this division are mostly Muhammadans. These prospects they cannot profit by unless they have English education, and it is for this reason that even in the remotest corners of the division, in places where the people were regarded as almost outside the pale of humanity, they are now clamouring for Anglo-vernacular schools."[10]

Special encouragement.

409. An account of the various measures which have been taken to encourage Muhammadan education was given in the last Quinquennial Review. Chief among these are the ap-

[10] Punjab, p. 139.

pointment of special Muhammadan Inspectors, the employment of Muhammadan teachers, the establishment in places of special Muhammadan schools and the reservation of scholarships for Muhammadan children. During the past five years further development has been made on the same lines. In Bihar and Orissa, the number of special inspecting officers for Muhammadans was increased by eight district or sub-inspectors and by seven inspecting maulvis. In addition a Superintendent of Islamic Studies was appointed; whose duty will lie mainly in the improvement of the *madrassas* but who will advise also on general questions affecting the education of Muhammadans. In this province the number of training schools for Muhammadan teachers was increased from 12 to 15, though it is difficult to obtain qualified candidates for training. Six peripatetic teachers are also provided for the education of Muhammadan women and twenty-six *atus* who teach Muhammadan girls collected for the purpose at convenient centres. In Madras, too, three additional Muhammadan inspecting officers were appointed besides one for Muhammadan women. In Bengal, a scheme for the establishment of Islamic Matriculation and Intermediate Examinations was sanctioned by the Government in 1918. They were at first departmental examinations, but their control has now been transferred to the newly-constituted Intermediate and Secondary Education Board, Dacca. In Bombay in addition to the Muhammadans employed on the ordinary inspecting staff there are four special deputy inspectors for Muhammadan education, one for each division of the Presidency proper, and three special deputy inspectors for Mulla schools in Sind with twelve assistants. It is difficult to secure men with the required qualifications. Of thirty-seven Muhammadans employed in inspection and secondary schools only twelve are graduates. Special Urdu classes have been attached to vernacular training colleges in this Presidency; there are now six such classes and it is proposed to convert them into separate institutions. In Burma four training classes for Urdu masters were opened which are "the best hope at present for the improvement and permanence of the schools they serve."[11]

Bihar and Orissa.

Madras.

Bengal.

Bombay.

Burma.

410. Among the new measures taken by Government to encourage Muhammadan education during the quinquennium is the opening by the Government of Madras of a Muhammadan college in the Madrassa building and of three Muhammadan high schools, and the duplication of classes in certain high schools in order that the Muhammadan pupils may receive their instruction through the medium of Urdu.

Madras.

[11] Burma, p. 17

United Provinces.

411. A comprehensive scheme was initiated by the Government of the United Provinces in 1916. Though the ordinary schools are open to all classes, it was felt that they were not always acceptable to Muhammadan parents and a rule has therefore been framed to the effect that district boards should open special Islamia primary schools in any village where a sufficient number of Muhammadan parents come forward to guarantee the attendance of at least twenty boys. District Boards are required to provide properly qualified Muhammadan teachers for these schools in which the ordinary curriculum is taught wholly in Urdu. Since some Muhammadan parents are averse to sending their boys to secular schools measures were taken at the same time for the encouragement of *maktabs*. A special curriculum of the secular subjects to be taught in them was drawn up. A *maktab* committee was appointed in each district for the supervision and encouragement of this class of schools and a central *maktab* committee for the whole province. For the proper supervision of Muhammadan education a special Muhammadan inspector was appointed for the province and special deputy inspectors, one for each division. The scheme has been in force for about five years and its advantages and its weaknesses are now apparent. "The Muhammadan community have been gratified by having separate schools and have patronised them freely, but at the sacrifice of a sounder secular education that could have been found in the ordinary district board schools."[12] The number of Muhammadan pupils in the ordinary board schools has declined during the last two years by eight thousand. On the other hand, the number of scholars in the Islamia schools has increased from 3,000 to 21,000 and in aided *maktabs* from 9,000 to 23,000. As a result five per cent. of the Muhammadan male population of the United Provinces is being educated as against 3·73 of the Hindus.

Sind.

412. The following figures show how the *Mulla* school system in Sind has expanded during the quinquennium[13]:—

Year.	No. of schools.	No. of pupils.		No. of deputy educational inspectors.	No. of Assistants.	Grant.
		Boys.	Girls.			
						Rs.
1917-18 . . .	580	11,388	3,697	1	3	44,012
1918-19 . . .	827	15,775	6,451	2	11	78,509
1919-20 . . .	1,318	25,378	10,322	3	12	1,60,994
1920-21 . . .	1,430	28,746	8,680	3	12	1,90,078
1921-22 . . .	1,010	20,121	8,799	3	12	1,34,328

[12] United Provs., p. 130.
[13] Bombay report.

The drop in the number of schools in the last year of the quinquennium is due to the adoption of a deliberate policy of concentration on the more efficient schools. It is admitted that hitherto the *mulla* schools have not proved very effective in coping with the problem of illiteracy. But there are signs of improvement. "I regard", says the Inspector in Sind, "as the most hopeful sign for the ultimate success of these schools the readiness with which the *Mullas* have themselves submitted to training. Four classes are ordinarily held in different parts of Sind for three months each during the year and about a hundred *Mullas* are trained every year. That these men, many of them grey-beards, should consent to sit on a bench and be taught like school boys is, I consider, a very remarkable thing."[14] It is to be hoped that the standard of instruction will rise. It is not in the interests of the Muhammadan community that they should be encouraged to attend special denominational institutions, if the standard of education therein provided is so low that the ex-pupils find themselves at a disadvantage when compared with the ex-pupils of the Local Board schools in after life.

The Frontier.

413. The most backward section of the Muhammadan population of India is naturally to be found in the tribal areas and agencies on the north-west frontier of India. Even here, in spite of an Afghan war, a Mahsud campaign and the usual frontier disturbances, some headway has been made with education in recent years. There are now thirty-one primary schools with an attendance of 1,166 pupils and two secondary schools attended by 340 pupils in agencies or trans-border tracts. In the Malakand Agency, for example, where secular education was quite unknown a few years ago, there is now a secondary school with 120 pupils and eight primary schools with 268 pupils. The Islamia College situated at the mouth of the Khyber Pass continues to draw students from various frontier tribes. It included on its rolls at the close of the quinquennium, two Sayeds and three Mahsuds from Wana, one Waziri from the Tochi, two Turis from Kurram, eight Afridis and three Shinwaris from the Khyber Pass, seven Akhunzadas from Lower Swat, five Swatis from Upper Swat and eight Chitralis (including four members of the ruling family). The civilising power of education is put to a severe test when it is applied to such material and the continuance of a blood feud during vacations is not unknown.

(*iv*) *Education of Depressed Classes.*

Meaning of term.

414. It is not easy to explain what is meant by the 'depressed classes.' The term bears a different significance in

[14] Bombay report.

different provinces, even in different parts of the same province. Consequently no general statistics that would bear scrutiny can be supplied of the educational progress among the depressed classes. From the point of view of the educationist a child may be said to belong to a depressed class if his or her presence in the common school is resented by respectable parents. It is in fact this prejudice, even more than their own disinclination for schooling, which has kept the depressed classes educationally backward. Sometimes even when low caste children are admitted into ordinary schools they are segregated from the other children and made to sit on special benches. In the Multan Division, for example, 'boys of low castes such as *chamars*, *musalis*, and *sansis* occasionally attend ordinary schools, but they are generally seated apart from the children of higher castes.'[15] Such segregation, however much to be deprecated, cannot seriously affect the children's education, but there can be little advantage, except possibly in prestige, gained by an Adi-Dravida child who on admission to school is seated outside the school building. It has been found necessary to prohibit this practice in Madras. In the Central Provinces also a committee, which was set up by Government in 1921 to consider amongst other things the education of the depressed classes, has found it necessary to recommend equality of treatment for all castes admitted inside the school.

Segregation.

Low-caste schools.

415. To avoid difficulties arising from prejudice a certain number of low-caste schools are to be found in most parts of India. These schools are not particularly efficient. There is a natural difficulty in obtaining teachers for them as high-caste masters do not wish to serve in such schools and so far the depressed classes have been able to produce few teachers.

Increasing attendance at ordinary schools.

It is a most hopeful sign of the times that all provincial reports record a tendency to discard special schools, an increase in the number of low-class boys attending ordinary schools and, what is even more surprising, a larger attendance of high-caste boys at the so-called low-caste schools. Local Governments have consistently made it their aim to abolish all distinctions of caste and creed in the public elementary schools. The Madras Government, for example, has by successive orders issued in 1919, 1920 and 1922 emphasised the necessity for the free admission of boys of the depressed classes to schools under public management. It is now only where such schools or mission schools have no accommodation for more scholars and where in addition there is a large depressed community that the opening of a special school is

(*a*) Madras.

[15] Punjab, p. 143.

sanctioned. Another obstacle to the admission of low-caste children to schools under public management in Madras is being gradually overcome. In 1921-22 nearly one hundred and fifty schools situated in temples and rented buildings the owners of which objected to the admission of Adi-Dravidas have been removed to premises accessible to all castes. In the Central Provinces the same policy has always been followed. (b) Central Provinces.
" Consistently with the policy of the equal right of all castes to education, and lest the opening of special schools should be held to justify the exclusion of depressed classes pupils from the ordinary schools in the same locality, Government has never encouraged the opening of specially designated schools for depressed classes in localities in which facilities exist for education in ordinary schools. On the other hand, in localities where the majority of the pupils are drawn from the depressed classes, forty-two vernacular schools ostensibly intended for these classes exist."[16] " In the Amballa Division of the Punjab there are only 15 low-caste schools against 30 five years (c) Punjab.
ago, and the attendance at these schools has fallen from 703 to 410. On the other hand the attendance of low-caste children at ordinary schools in the Division has risen by 482 to 772."[17] In the Lahore Division although 47 schools are returned as low-caste schools they actually contain 431 low-caste and 1,733 high-caste children. In the United Provinces " the marked (d) United Provinces.
increase of attendance of low-caste boys in the mixed schools is significant of a lessening prejudice among their school fellows, and resentment at ostracism is shown by a growing objection to the present nomenclature of the special schools."[18]

416. Whether, if all such obstacles to attendance were over- Causes of irregular progress.
come, there would be any large increase in the number of low-caste boys attending school is uncertain. On this point the evidence is conflicting. In the Fyzabad Division of the United Provinces, for instance, the chairmen and the inspectors agree that the rise in wages has retarded progress. The zamindars, too, are reported to be averse to elevating these classes, and they themselves are unambitious, and so it seems that what progress has been made is due to the Government, to its local officials and to certain middle class enthusiasts. On the other hand, the chairman of the Etawah Board reports that " once the leading members of these communities were sympathetically approached, I found there was a tremendous craving for education."[19]

417. There is no doubt that these communities depend more than any other on the earnings of their children to

[16] Central Provs., p. 82.
[17] Punjab, p. 143.
[18] United Provs., p. 133.
[19] United Provs., p. 134.

supplement the family budget. In Madras it is necessary to offer inducements to the parents of Adi-Dravida children to persuade them to send their children to school, since, they prefer to send them out to earn and, if to school at all, to night schools. From Tirhut it is reported that in Saran special measures have been adopted for the education of Doms, quarterly payments being made to the parents of those who attend school. The rate of these payments varies from Rs. 4 to Rs. 48 per quarter according to the class in which the boy is reading. In this province—Bihar and Orissa—small capitation allowances are sometimes given to teachers of primary schools for teaching children of the depressed classes.

The Namasudra community in Bengal is "raising its status rapidly, and, arguing mainly from its consistent educational advance, is constantly making out a case for being regarded as other than backward."[20]

418. The prejudice against the admission of low-caste children into public schools is felt more strongly in towns than in rural areas. If compulsory education is to be introduced effectively in towns, it is clear that for some time to come municipal committees must be prepared to undertake the cost of providing separate schools for children belonging to the depressed classes.

(v) *Education of Aboriginal and Hill Tribes.*

Reasons for backwardness.

419. Unlike the depressed classes who are found in considerable numbers in all parts of India, the aboriginal and hill tribes are confined to certain areas, into which indeed they were driven in early times by more civilised invaders. Their education presents peculiar difficulties. They are addicted, almost without exception, to pastoral or agricultural pursuits. They have no ambition to enter clerical employment or Government service, nor have they, like the depressed classes, any feeling of inferiority to their neighbours, which might create in them a spirit of discontent with their lot. On the contrary, they are often a very contented folk. Of the Eastern Tharus of the United Provinces an inspector writes: "I am not sure that these people are ready for literacy; they seem to be quite happy and proud of their forest environment, and in many respects they are far superior to their neighbours particularly as regards hygiene. There is no scope for the literate inside the jungle belt and the Tharu cannot live in the open plains." Another very serious difficulty is the great variety of the languages spoken by these hill folk and their complete lack of any literature. Many of the languages have

[20] Bengal, p. 84

only been reduced to script, and thereby standardised, by missionaries in recent years. In the Naga Hills "it is almost possible to botanise in languages—probably in all the world the area most prolific in this kind. Here we have schools for Angamis, and schools for Aos, schools for Lhotas and schools for Semas, and there is a whole range of tribes or peoples practically untaught because their language is unteachable. Tribal traditions exclude the possibility of settling one Naga language for the whole area. The tribes dwell aloof from one another in linguistic isolation. The Nagas.

"To teach these little peoples in their own languages is to restrict them to the opportunities of enlightenment which their languages afford. Even in the case of the largest and the most advanced of the hill races the preparation of textbooks is a very serious obstacle. In all cases the elaboration of a literature is an impossibility."[21]

420. It must not be thought that the fact that a tribe is described as aboriginal necessarily implies that its standard of civilisation is below that of its neighbours. Although this is often the case yet some of these tribes have made much advance in civilisation in recent years. Such, for instance, are the Khasis of the Assam hills. The Khasis are, as a tribe, animists (worshipping a snake), but they have taken readily to Christianity. Education in the Assam hills is chiefly in the hands of Christian Missions. Amongst the Khasis there are now 390 schools run by the Welsh Calvinistic Methodist Mission, 10 by Roman Catholic Missions and 76 by Khasi Christians. The number of pupils has increased during the quinquennium from 11,220 to 13,772. Co-education is universal; for the Khasis follow the matriarchal system. Education is free except in a few rice-collection schools. The Khasis.

421. In the Garo Hills the policy in recent years has been to transfer mission schools to Government management. Of the 155 schools 101 are now under Government. The Director is doubtful of the wisdom of this policy. The number of scholars has fallen from 4,252 to 3,920 and the standard of instruction in the schools appears to be very low. Their own deputy inspector remarks: "I have very little to say on the progress. While in other places the progress has busily been engaged at and it is moving about like other planets in the firmament it has been quite stationary here just like the sun."[22] The Garos.

422. In the neighbouring province of Bengal there are a number of schools for aboriginal classes in the Chittagong Hill Tracts as well as two boards of Sonthal education in the districts of Midnapore and Bankura. Schools for Sonthals have The Sonthals.

[21] Assam, p. 101.
[22] Assam, p. 99.

also been opened in the Dinajpur district. The bulk of this community resides in the province of Bihar and Orissa, the Government of which has adopted a number of special measures to provide for the education of aborigines. It maintains a special staff of two deputy inspectors and thirteen sub-inspectors for the inspection of aboriginal classes. It reserves three rural guru-training schools for aborigines and aids five mission training schools. It reserves a number of scholarships for pupils of this class and allows their admission to Government schools at reduced rates. There are 58,300 aborigines attending school in Bihar and Orissa (including 8,000 girls), of whom 36 have actually reached the university stage.

Aboriginals of (a) Bihar and Orissa.

(b) The Madras Presidency.

423. In Madras there are a number of special schools for such communities as the Chenchus, Lambadis, Irulas, and a training school for Khonds and Panos has been opened at Udayagiri. The progress of education among the Todas in the Nilgiri Hills has had its vicissitudes, but Government and private donors have provided scholarships to enable Toda boys to read in the Municipal High School at Ootacamund.

(c) The Bombay Presidency.

424. Fair progress is reported from Bombay in the education of Bhils, Kolis and similar aboriginal tribes. The number that reach the higher stages is still very small; not one hundred out of twelve thousand pupils were in the secondary stage in 1922. Still the number of teachers recruited from these tribes is increasing. Great efforts have been made in recent years to promote education among the Kaliparaj, an aboriginal tribe living in the half forest tracts of Surat. At first trained teachers were sent to their villages, but finding the surroundings uncongenial they directed their energies to getting their schools closed. A central school was then started as an experiment to educate Kaliparaj boys to become teachers for their own community. The success of the school has been phenomenal. On three different occasions a boy from this school has stood first among 500 competitors, mostly of advanced Guzerati communities, at the entrance examination of the Ahmedabad Training College. There are now 70 ex-students of this school teaching in village schools of their community. In this direction the school has nearly fulfilled its function; and the question of developing agricultural and technical training here and at the Diwa Central School for Bhils and Kolis in Broach is under consideration.

Much good has been accomplished in the Bombay Presidency in recent years by the Depressed Classes Mission Society which is carrying on work on the same lines as that conducted by Christian missions for many years. The Society has its headquarters at Poona with branches at Bombay and Hubli, and has received support from many members of higher communities.

(*vi*) *Education of Criminal Tribes.*

425. Still lower in the scale of civilisation are the criminal tribes. The hereditary occupation of these people is thieving, in particular cattle-lifting and house-breaking. They are for obvious reasons usually nomadic. Under the Criminal Tribes Act Government is empowered to settle any notified criminal tribe in a definite locality, where endeavours can be made to convert the settlers and the children into good citizens by enabling them to earn an honest living and providing the children with education and moral instruction. There are ten such settlements in the Madras Presidency of which seven are managed by private societies and three by Government. Each settlement has its own school at which attendance is compulsory. There were altogether 1,443 scholars in these schools at the close of the quinquennium, of whom 53 were adults. The Madras Government have also established two industrial schools under the management of the Salvation Army—one at Bangalore for boys and one at Nellore for girls. In addition to general knowledge the boys are taught gardening, silk-worm rearing and silk reeling and the girls domestic duties, needlework and lace-making. Settlements in Madras.

426. In the Punjab a criminal tribes department was established in 1917. It had during the first year five schools attended by 271 pupils. The number has increased. There are now twenty schools for boys with 730 pupils and thirteen for girls with 431 pupils. There are in addition 116 boys attending industrial schools and 1,855 attending ordinary primary schools in the districts. The officer in charge considers that the children of criminal tribes are usually "more impressionable and above the average in intelligence." It is perhaps not surprising to hear that "they pick up things more quickly than ordinary children and retain them." Education is now compulsory for boys from criminal tribes in settlements between the ages of six and twelve or up to the primary standard. Boys of this class are exempt from fees. Several youths of the Mina criminal tribe have passed the normal school examination and are working as teachers in schools for their community. Schools in the Punjab.

427. In the Bombay Presidency there are thirty-six schools for children belonging to criminal tribes with an attendance of 1,477: but there are in addition four thousand children of this class attending ordinary or mission schools. There has been great difficulty in obtaining good teachers for the special schools; consequently, though education is compulsory in criminal settlements, there has been a good deal of stagnation in the lower classes. This difficulty is being gradually overcome. The large settlements at Sholapur and Hubli and the Schools in Bombay.

smaller settlements at Baramati and Gokak are under the management of missions, which have provided for education on a generous scale, with whole-time lady superintendents. A similar appointment has now been made for Government settlements.

(vii) Education of Children of Labourers in Factories and Tea Gardens.

428. There is a marked increase in the number of schools for the children employed and the dependents of the labourers in private factories. This points to an awakening on the part of the employers to a sense of their duties towards their employees. For example, in Madras alone, the number of such schools has increased from five to twenty-six with a final enrolment of nearly 3,000 pupils. The largest and best of these schools are those attached to the Buckingham and Carnatic Mills. Messrs. Orr & Sons, Scientific Instrument makers, have established a work school to improve the education of the young boys employed by them. Practical classes are taught by the European Works Manager and the literary classes by a trained Indian teacher. Government meets half the cost of this experiment. This example has been followed by Messrs. Addison & Co., who have established a set of classes for the apprentices employed in their printing press.

1 Madras.

In Bengal.

429. In Bengal, the number of pupils in the three schools for children employed in factories has risen by 150 per cent. from 1,000 in 1916-17 to 2,500 in 1921-22. The schools are in a very flourishing condition.

Among schools for the children of those engaged in special industries may be mentioned the schools for the children of fishermen in Dacca where in addition to instruction in the three R's boat-repairing and net-making are taught.

Tea garden schools.

430. The largest class of schools of this character is that provided for the children of tea-garden coolies in the hill districts of Bengal and Assam. The number of tea-garden schools fell during the past five years from 136 to 94 in Bengal and from 149 to 81 in Assam. "These figures speak for themselves. Managers are not actively hostile. The majority are benevolently detached. Were there a demand, they might encourage it, but in most gardens there is no demand. The advantage of the existing schools is not obvious to those concerned. The labour force, recruited from the backward areas of many provinces, speaking half a hundred languages of their own and for common use in the garden and bazar the macaronic dialect of the garden which they serve, do not want schools to teach them literary Bengali or Assamese. Indeed

they do not want schools at all, and when there is no pressure or compulsion outside the tea-garden there is nothing to be said in favour of pressure or compulsion in the lines."[23] Nevertheless it is possible that the trouble recently experienced in the tea-gardens might have been less if the coolies had not been steeped in ignorance and so listened too readily to the appeals of the agitators. The decline in the Bengal schools is also attributed to the general depression in the tea market and the prevailing distress which compelled many children to forsake school and work as whole-time labourers.

In order to illustrate what may be accomplished by employers who recognise their responsibilities and the value of education for their operatives, I give at greater length an account of two educational experiments, the one in a factory under private management, the other in a group of Government factories.

431. From a recent Bureau publication is taken this description of the educational work carried on by the Tata Iron and Steel Company at Jamshedpur (a town in the Singhbhum district of Bihar and Orissa). The area now in possession of this Company covers about 25 square miles with a population of about 71,000, excluding a considerable number of coolies who come to the town daily for their work but live in the neighbouring villages. The first school started in this town was the Mrs. Perin Memorial School, opened as a middle school in 1915 in memory of the wife of the consulting engineer to the Company. Since that date the school has developed into a high school working up to class XI, and is regarded as competent to present candidates for the school-leaving certificate examination. The number of pupils on the roll is 127. This number seems small for so large a town, but apparently many of the boys in Jamshedpur obtain employment in the works when they are young and also the proportion of persons living with their families at Jamshedpur is probably lower than elsewhere. There is also a girls' school teaching up to the upper primary stage with 88 pupils on the roll and six teachers. It contains Hindi and Bengali sections. The Mrs. Perin Memorial Technical School meets in the evening for teaching drawing, mathematics, mensuration, and mechanics to apprentices in the Steel Works. The school is attended by fifty students. The commercial school, designed for the instruction of clerks in shorthand and typewriting, is attended by fifty students. The English school, designed for the instruction of those children, whose parents wish them to be taught through the medium of English, is under the supervision of an Anglo-Indian lady. It is attended by eleven pupils in various

At Jamshedpur (Bihar and Orissa).

[23] Assam, p. 63.

stages of primary education. The latter three schools have no buildings of their own, but are housed in the Mrs. Perin Memorial and girls' schools. There are two primary schools managed directly by the Company attended by 231 scholars. The English teacher is common to both schools and teachers in each school for three days in the week. In addition to the above schools there are nine upper primary schools with which the Company has less direct connection. They have in all 768 pupils with 27 teachers. Some of these schools were started by the Servants of India Society, which however gave up work in Jamshedpur at the time of the strike. These schools are now placed under the Welfare Department of the Company. The general administration of the schools is in the hands of an influential committee including employees of the Company and two Indian ladies. Government gives grants towards the recurring expenses.

(viii) Education and training in the Government Ordnance Factories.

Education in Government Ordnance Factories.

432. The following account of the education of youths employed and the children of employees in Ordnance Factories has been supplied by Major-General Kenyon, Director General of Ordnance in India. It has been incorporated without change:—

The Government Ordnance Factories are at present eight in number; the Metal and Steel Factory and Rifle Factory at Ishapore near Barrackpore to the north of Calcutta; Ammunition Factories at Dum-Dum, near Calcutta, and at Kirkee near Poona; Gun Carriage Factory, Jubbulpore; Harness and Saddlery Factory, Cawnpore; Cordite Factory, Aruvankadu near Coonoor, Nilgiris, South India. The Ammunition Factory at Dum-Dum is about to be closed and will not be referred to again.

Besides the men and boys employed in the factories (a rough approximation being 1,500 to 2,000 in each factory in peace time) there are workmen's lines or villages belonging to the factories in which a number of the employés and their families live and the policy is to offer educational facilities for these. At Ishapore about 1,200 families are housed; at Jubbulpore about 900; at Cordite Factory, 300; at Kirkee, 100.

Range of technical training.

433. These factories cover a wide range of industries or trades and in them, therefore, Government have an excellent series of establishments in which it is possible to organize good technical training of a thoroughly practical nature coupled with theoretical instruction. The lads learn to work under factory conditions, which they cannot do in a technical college. It is hoped that very shortly such a system will be

definitely approved and the present extemporized apprenticeship training be improved and put on a permanent basis.

As to what can be taught in the factories, the following observations give some idea. All factories are run electrically with their own generators, which are driven either by steam power, internal combustion engines or water power. At the Metal and Steel Factory, there are acid and basic open hearth steel furnaces, steel bar and rod rolling mills; brass making, rolling and drawing; foundry and smithy work; forging plant, etc. In the Rifle Factory probably the finest repetition interchangeable work done in India is carried out. At the Gun and Shell Factory, varied machine work (breach mechanisms, fuze, shells) of a high standard of accuracy, is carried on. At Jubbulpore, general engineering work of a varied nature and of a high quality is done. At Kirkee, there is a good deal of varied engineering work besides explosives work. At Cawnpore, good leather from Indian hides is produced in the tannery and curriery and harness, saddlery and leather work of many sorts is carried on. At Cordite Factory, nitric and sulphuric acid are made as well as gun cotton, nitro-glycerine and cordite; a good training in chemical engineering can be obtained there. The finest gauge making and tool making are done in most of the above factories, and drawing office instruction is also given.

Elementary education.

434. The educational scheme, which the factories are endeavouring to follow is to provide primary and Anglo-vernacular education for the children living in the lines and as much compulsion as possible is brought to bear on these children to make them attend and a similar policy is followed with boys employed in the factories. As regards the latter, the normal procedure now followed is to make regular school attendance a condition, when a new boy is taken on, and for existing boys a condition, when an increment of pay is given; in such cases also, a small deduction of about 8 annas a month is made from the boy's pay and used towards the maintenance of the school. To avoid harshness especially on boys, who come from a distance and would have difficulty in attending the factory school, compulsion has not been suddenly or universally applied, but is being gradually extended.

435. Besides financing the schools by contributions from the boys as explained above, at Jubbulpore and Cawnpore, a monthly grant is made from Factory funds, whilst at Jubbulpore and Ishapore the provincial governments make grants. In every case, stress is laid on English, as if the boys eventually go into the Factory, a knowledge of English is very useful in enabling them to read notices, drawings, instructions, etc., and to go on to the more advanced instruction, which is given to "Boy artisans" and "Apprentices."

436. At the Rifle Factory, Ishapore, with the concurrence and co-operation of the Bengal education authorities, a somewhat original curriculum has been drawn up to give such elementary education as will be specially useful for artisans; the time spent on the vernacular has been reduced and as much time as possible given to English, arithmetic and drawing. This is rather in the nature of an experiment in the training of boys intended for an engineering career.

At Ishapore, a small beginning is also being made to prevent lapse back into illiteracy, which is, however, probably more common in purely country areas where a boy never sees anything, even notices or advertisements, to read. This attempt is taking the form of getting the Factory Co-operative Society, which is a flourishing concern, to stock a few cheap books and it is hoped in co-operation with the schools to get a sale for these; this, if successful, should also help children to learn to read, as many a child, when he has once begun to read, will rapidly improve if he can have cheap story books to read by himself. As the effort is to teach English as much as possible, the large choice of elementary and nicely illustrated children's books published in English can be made use of for this purpose. Suitable vernacular books of this sort are far less obtainable.

437. At Kirkee, there is a group of schools run by the Alegaonkar Brothers in the neighbourhood of the Factory and factory boys are encouraged and to some extent coerced into attending these schools. Boys whose pay has been fixed on the understanding that they attend school get their pay cut if their attendance is unsatisfactory. Reports are received from the schools to enable this point to be watched. The boys' contributions to these schools for the year amount to about Rs. 1,500 in the year.

One of the Messrs. Alegaonkar's schools is situated in the Factory Workmen's Lines, so that the children in the Lines can go there easily. Two quarters in the Lines have been given up for this purpose.

438. At Cordite Factory, an evening school has been run for some three years by the clerical staff of the Factory on purely voluntary lines. It is very creditable to the clerical staff that they have initiated and persevered in this work. There are about 85 on the rolls, mostly boys, though there are some of the men of the Factory. The classes are held immediately after the Factory closes, in premises in the Factory; the instruction is principally in English and Tamil. It is very pleasing to find this practical idea of service to their uneducated fellow countrymen thus evinced by the factory clerks. The approximate numbers in the factory schools are 120

at Ishapore; 25 Cossipore; 115 Cawnpore; 95 Jubbulpore; 278 Kirkee; 85 Cordite Factory.

439. Boy artisans are boys who are in training to become skilled artisans. For their practical training they are attached to skilled workmen, whilst for instruction in English and for theoretical training they are sent into the schools connected with the factories. To take the Rifle Factory, as an example, there are at present 30 boy artisans, who are normally recruited after leaving school and are usually the sons of factory workmen; their age at recruitment is from 14 to 16; they are compelled to attend a night school in the Factory school and those under 15 attend the day school from 3 to 4 P.M. on working days (*i.e.*, in working hours). The work includes English, Elementary Mathematics and Drawing, all of which will be directly useful for them in the Factory. Boy artisans.

Similar arrangements are in operation at Cossipore, Cawnpore and Jubbulpore, theoretical instruction up to 10 or 12 hours a week being given in class rooms in the Factory premises during working hours. There are 76 boy artisans under training at Jubbulpore, 58 at Cossipore, 89 at Cawnpore.

440. The most advanced form of training and education that the Ordnance Factories attempt is that of apprentices. Apprentice training.

Somewhat different methods are followed at each of the factories according to local facilities for theoretical instruction, housing, recruits obtainable, etc.

Apprentices generally begin on Rs. 40 a month, increasing in subsequent years. A deduction is made if they are housed as is the case occasionally. They have to keep factory hours and to observe factory discipline. They are given 10 to 12 hours theoretical instruction in working hours per week and are encouraged to do more. For their practical work, they go through a definite prescribed course of so many hours or days in each part of the factory. The whole course usually lasts five years. An apprentice must have received a good education before he is accepted; no definite educational standard has yet been laid down as the scheme is new and to some extent experimental and each factory had to establish its own connection and ascertain what class of youth they could obtain. Experience is showing that there is plenty of demand from parents and the lads themselves for this training. There can be no two opinions as to the importance of this sort of training for the progress of the country. It has worked out so far that at Ishapore the apprentices are nearly all Hindus and the standard for admission is Intermediate Arts or Science, though some B.A's and B.Sc's have been taken. At Cossipore also the apprentices are nearly all Hindus; at

Jubbulpore and Kirkee they are principally, though not entirely, European or Anglo-Indian; at Cordite Factory, 14 are European or Anglo-Indian and 18 are Indian; at Cawnpore, 3 are European or Anglo-Indian, 9 are Indian. In every case there are considerable waiting lists and applications come from all over the country. At a recent competitive examination at Jubbulpore, there were 43 candidates for 14 vacancies and of those rejected 10 were matriculates. The educational standard aimed at is that of I.A. or I.Sc. or corresponding qualification from European schools. An age limit has not been definitely fixed till it is seen how supply and demand balance, but nineteen is looked upon as a desirable maximum.

Theoretical instruction for apprentices.

441. Different methods have had to be adopted to give the necessary theoretical instruction, according to what local facilities are available. The Rifle Factory staff have shown an excellent spirit of unselfish service in undertaking this theoretical instruction in addition to their other factory duties; in this way more advanced instruction in mathematics and science is being given, without any outside help or remuneration, than had originally been thought possible. The original idea of apprenticeship had aimed at most at producing lads who might eventually become foremen. At Ishapore, owing to the unexpectedly high class of lad or young man which has come forward and to the high standard of instruction that has been given by the staff it seems to be possible that the Factory may turn out men fit later on to be appointed to the officer grades of the factories staff after probationary periods in the lower ranks.

442. The Cossipore apprentices get their theoretical instruction by attending the Calcutta Technical School; at Jubbulpore, the co-operation of the Robertson College has been secured and the lads attend classes specially arranged for them there. At Cawnpore, the factory staff give special lectures on tanning and curriery work and the apprentices take courses from the International Correspondence School. These courses are also undertaken (compulsorily in every case) by the apprentices at Kirkee and Cordite Factory. As said above 10 to 12 hours a week in working hours are allotted to this theoretical work.

In every factory, the apprentices are encouraged and helped to go in for games and sports and some very successful teams have been turned out by them.

443. There is evidence that the bad old idea in India that manual labour and factory work were degrading and beneath the dignity of lads of good families is slowly breaking down. The factory staff have had to face this difficulty and a good

deal of persuasion and humouring have had to be used, but progress seems to have been made. By starting a lad in the hard grimy work of the smithy it is soon seen if his heart is in the work.

444. The lads have to sign an agreement before being taken on and are given a certificate on completion of the course showing what they have done. On completion of their course, they are free to leave the Ordnance Factories and to seek employment elsewhere if they like. On the other hand, if they wish to stay on, employment would be offered them in the Ordnance Factories. If a lad was very efficient and if a vacancy occurred he might be taken on first, on completing his apprenticeship in a supervisory capacity, on perhaps Rs. 150 a month; otherwise he would probably start on Rs. 100 or 120, perfecting his training in some particular branch of work; in temporary supervisory billets he might rise toward Rs. 200 a month; the lowest permanent posts are those of chargemen, who commence on Rs. 200 rising eventually to Rs. 350 with contributory provident fund; above the chargemen come assistant foremen (Rs. 375 to 490) and foremen (Rs. 500 to 650). There is no bar to an apprentice rising to these positions, provided he is qualified by technical knowledge, efficiency and character. After employment.

The scheme for apprentice training in the Ordnance Factories aims at training 120 at the Metal and Steel Factory, the Rifle Factory and Gun and Shell Factory, Cossipore, combined; 50 at Jubbulpore; 40 at Cawnpore; 40 at Kirkee; and 40 at Cordite Factory. Approximately two-thirds of these numbers have already been reached. European, Anglo-Indians and Indians are all accepted, and the training is such that they should eventually be able to rise to the rank of foreman, though the apprentices are free to leave the Ordnance Factories and seek employment elsewhere if they prefer to do so.

(*ii*) *Education of Defectives.*

445. Considering the limited funds at the disposal of provincial governments and local bodies for the provision of education for the whole, there is no reason to wonder that little attempt has been made to provide education for the defective. The traditions of the country assign the care of the poor and helpless to their relatives and neither public nor private philanthropy has hitherto been called upon to maintain those large institutions for the destitute and the disabled which form such a feature of western civilisation. Consequently, although the last census returns show that the number of blind and deaf- Limited activity.

mute children between the ages of five and fifteen in British India is at least 73,000, there are in all India only eleven schools for the blind and thirteen schools for deaf-mutes. It is doubtful, even if there had been any demand for an increase in their number, whether public opinion would have favoured the diversion of funds to this purpose. The advantages of teaching a blind child to read or a deaf-mute to speak are too remote to make any effective appeal in a society which still measures education largely by its economic value. But the fact that the attendance at these institutions is only 1,183 shows that for some time to come they are capable of meeting any natural increase in demand. The institutions are distributed as follows:—

Statistics.

Statistics of Blind and Deaf and Dumb schools, 1921-22.

Province.	Schools for deaf-mutes.	Schools for the blind.	No. of pupils.			Remarks.
			Deaf-mutes.	Blind.	Total.	
Madras . . .	4	2	(No information).		336	
Bombay . .	4	2	91	89	180	There are a few more institutions for which no statistics are available.
Bengal . . .	3	1	(No information).		420	
United Provinces .	..	1	..	40	40	
Punjab . . .	..	1	..	28	28	
Burma . . .	1	3	19	80	99	
Bihar and Orissa .	..	1	..	60	60	
Central Provinces & Berar.	1	..	11	..	11	
Total .	13	11	*121	*297	1,183	

* Figures defective for want of complete information.

Education for employment.

446. These schools all provide some practical training suitable for defectives, such as basket-making, mat-weaving and music for the blind and tailoring and carpentry for the deaf-mutes. It is reported from Bombay that many of the blind become musicians and find a ready patronage in private houses. Blind musicians are also employed as instructors in girls' schools. Some blind Muhammadans memorise the *Koran* and are employed as *Koran* instructors in *maktabs* or *Muazzins* in mosques. But the number of defectives who so earn a livelihood is very small; many, it has been said, are maintained by their families; many, on the other hand, maintain themselves by their infirmity. "The blind can, as a rule, earn more by mendicancy than by following a craft, and it is further said that those who have once tasted the joys of the road are loath to settle down to a life of humdrum toil."[24]

[24] Bombay report.

447. In Bengal, a school for deficient children was opened by Miss De Laplace at Kurseong in 1918. This school is probably the first of its kind in India and trains children who through mental or physical defects cannot derive much benefit from the instruction given in ordinary schools. Instruction is imparted by means of special apparatus, exercises and discipline suited to the nature of each individual case and it is reported that remarkable results have been achieved. The Bengal Government made a capital grant of Rs. 30,000 for the purchase of a site and also give a small monthly grant-in-aid. Other schools.

The special school attached to the Leper Asylum at Purulia in Bihar and Orissa had 111 boys and 135 girls on its rolls at the end of the period under review.

448. The Bombay Government in 1920 appointed a committee to consider the education of defectives and as a result of its recommendations offered liberal assistance up to two-thirds of the cost of maintenance to private and public bodies willing to start schools for these unfortunates; but so far the response has been small. A few individuals and societies, such as Professor Advani of Hyderabad and the Indian Association of Workers for the Blind, Mysore, keep alive some public interest in this subject but the time for any general advance is not yet come. The Bombay committee.

CHAPTER X.

EDUCATION IN THE ARMY.

General aims.

449. The Army in India undertakes the responsibility of the education of certain sections of the community. Its activities are directed into various channels with certain definite objects, which may be summarised as follows:—

(*i*) The education of the soldier, British and Indian, in order to—

(*a*) develop his training faculties;

(*b*) improve him as a subject for military training and as a citizen of the Empire;

(*c*) enhance the prospects of remunerative employment on his return to civil life.

(*ii*) The fulfilment of the obligations of the State to the children of soldiers serving and *ex*-service (British and Indian).

(*iii*) The provision, as far as possible, of training for the children of soldiers, who have died in the service of their country.

(*iv*) The creation of a body of Indian gentlemen educated according to English public school traditions, which should provide suitable candidates for admission to the Royal Military College, Sandhurst.

The schemes and institutions designed for the carrying out of these objects are in various stages of development. In some cases they are the modification or improvement of some older existing institution and, in others, new organisations have been necessary to meet new requirements.

The British soldier.

450. The scheme for the education of the British soldier in India is the one adopted for the whole British Army with suitable modifications. The principle, which is the basis for this scheme, is that enunciated in the Manual of Educational Training—"Educational training is an integral part of the normal training of a soldier" and, under this principle, officers and non-commissioned officers are as responsible for the education of the rank and file as for actual military training.

451. To assist Commanding Officers a corps of education experts consisting of officers, warrant officers and sergeants, and known as the Army Educational Corps has been formed. The personnel of this Corps are attached to the various formations and units, a due proportion being allotted to the Indian establishment of British troops. On account of the retrench-

ment advocated by the Geddes Committee and further, in India, by the Inchcape Committee, the Corps has been so greatly reduced that the original conception of its work has had to be considerably modified.

452. The constant changes necessitated have been a great handicap to steady progress, but the position is now stabilized and a definite routine established. Stages in educational progress are marked by examinations through which the successful candidates become the possessors of the 3rd, 2nd, 1st Class and Special Army Certificates of Education, respectively. All men must be in possession of the 2nd Class Certificate to be eligible for Proficiency Pay, and for promotion to warrant rank the 1st Class Certificate is necessary. The Special Certificate, the standard of which is approximately that of the Matriculation of the Home universities, forms a link with civil education, and is obtained by the man, who wishes to continue his education after leaving the Army, or to engage in some occupation in which a considerable degree of literacy is required. The teaching up to the standard of the 2nd Class Certificate is actually done by the officers and non-commissioned officers of the units. The higher training is given by a warrant officer or sergeant of the Army Educational Corps, attached to each unit, who also advises and assists in the more technical branches of the preliminary work.

453. In order that regimental officers and non-commissioned officers should be fitted for this branch of their duties a School of Education has been founded at Wellington with a staff of 9 instructors, where, during a course lasting 13 weeks, those attending are imbued with accepted education principles; afforded opportunities of refreshing their knowledge of certain class subjects; taught the elements of agricultural science, and given instruction and practice in the art of lecturing. All officers are compelled to attend one of these courses before promotion to Captain.

454. An important branch of educational training is yet in its infancy, but already much has been done in districts where facilities exist. This is the preparation of the British soldier for his return to civil life. Vocational training is the means to this end. Since for the purpose no additional funds are available, no training centre exists similar to the Hounslow and Catterick Vocational Training Centres at Home, but in large towns, like Calcutta, the assistance of local firms has been enlisted and men who are due for transfer to the Home establishment in the approaching Trooping Season are allowed to spend the last 3-6 months of their service with a selected firm learning a new trade, or refreshing their knowledge of

Vocational training.

one in which they were previously engaged. The great assistance afforded by the various firms to this important branch of work for the economic welfare of the Empire is an encouraging factor.

The Indian soldier.

455. The education of the Indian sepoy presents greater difficulties owing to:—

(*a*) the extreme illiteracy of the average Indian recruit;

(*b*) the scarcity of instructors.

The old type of teacher was found to be generally unsuitable to carry out the new educational ideals and endeavours have been made to create a new body of educationalists of the right type. The Indian Army School of Education has been established at Belgaum with aims similar to those of the British Army School of Education at Wellington. Candidates for training at this school are selected from (*a*) the ranks of the better educated serving soldiers, (*b*) existing civilian schoolmasters, and (*c*) demobilised and pensioned Indian officers and soldiers. These are under instruction for 2 or 3 terms of 13 weeks each by a staff of 5 British officers and 10 Indian officers and at the end of their course are recommended by the Commandant for a suitable rank in the Indian Army Educational Corps and posted to units. Up to date 322 of various ranks have been trained and posted particularly to training battalions.

The Indian Army Educational Corps is composed entirely of Indian personnel.

The minimum standard for military efficiency in the case of the Indian soldier comprises—

(*a*) ability to take part in a simple conversation in Urdu—the *lingua franca* of the Indian Army—on military topics;

(*b*) Literacy in Urdu in the Roman character.

In addition, the following subjects form part of the curriculum in Indian units:—

Map reading, geography, physical education, Indian and regimental history and Indian citizenship. Certain suggested standards have been laid down which men should attain progressively throughout their service, but Commanding Officers are allowed considerable latitude in their application.

British soldiers' children.

456. The educational needs of the children of British soldiers are met largely by the various regimental schools. No great changes have taken place in this direction, but an endeavour has been made to improve the qualification of the teachers and, as far as the present financial stringency will allow, to improve and supplement the obsolete furniture,

apparatus, books, etc. The education given in many of these schools compares favourably with that obtainable in the best primary schools at Home. These schools do not complete the provision made to fulfil the obligations of Government to afford adequate education for the children of the British soldier. The Lawrence Military School at Sanawar, mentioned in the last Quinquennial Review, provides accommodation for about 500 boys and girls, including a number of orphans, and educates them from the kindergarten stage to the standard required for the High School examination. In addition, the girls acquire the elements of domestic science, the boys do a certain amount of manual training; and commercial subjects are taught to both. Soldiers' orphans are admitted to the school free and the fees for other children are adjusted according to the rank and income of the parents.

Indian soldiers' children.

457. It has been realized for some time that some provision for the education of the children of the Indian soldier is urgently required. Sons of the martial classes have been found to be extremely backward educationally and the difficulty of compelling their attendance at school, during the absence of the father with his regiment, has also been realised. A scheme has therefore been completed, which it is hoped will accomplish for the Indian soldier's child what is being so successfully carried out for the British soldier's child at Sanawar. It has been decided to establish, for this purpose, in those areas which contain the majority of the military classes, a number of schools to be named the King George's Royal Military Schools and which will serve as a memorial to those Indians who fell in the Great War. "The Patriotic Fund" of about Rs. 11 lakhs has, by the express wish of His Majesty the King-Emperor, been appropriated for initial expenses and this will admit of the immediate erection and equipment of three schools. During his recent visit, His Royal Highness the Prince of Wales laid the foundation stones of two of these at Jullundur and Aurangabad Serai respectively, and it is expected that these two will be ready for opening early in 1924. The building of the third at Bareilly, United Provinces, is, for the present, postponed. The aim of each school will be to afford education of the Anglo-vernacular middle standard to approximately 200 children. Orphans and sons of disabled soldiers will be admitted to the schools free of all costs and the fees of other children will be proportionate to the parents' means.

458. In addition to this scheme the foundation stone has been laid at New Delhi by His Royal Highness the Prince of Wales of the Kitchener College. This institution is for the purpose of providing a high school education for the sons of Indian officers, and will accommodate 400 students. A sum

of Rs. 3 lakhs subscribed by Ruling Chiefs as a memorial to the late Lord Kitchener has been contributed towards the Rs. 33 lakhs required for the initial cost of building, but owing to the lack of further funds, it is regretted that the actual erection of the College cannot be proceeded with at present.

The Prince of Wales' Royal Indian Military College.

459. The last, but not least of the objects of the educational activities of the army in India, is being realized at the institution known as The Prince of Wales' Royal Indian Military College at Dehra Dun. The foundation stone was laid by His Royal Highness in February 1922, and the College was opened with 40 students shortly afterwards, a number which has now increased to 70—the limit prescribed by the present accommodation. The Commandant, who is an officer of the Indian Army, has a staff of 13 masters and instructors, who are supplied partly by the Indian Educational Service; the Army Educational Corps; the Indian Army, and partly by civilian masters recruited in England. It includes vernacular teachers and a maulvi, a *garanthi* and a shastri for religious instruction. The staff and cadets are accommodated in the buildings of the Old Indian Cadet Corps. The aim of the institution is to provide education on the lines of an English public school for the sons of Indian gentlemen, both civil and military, up to the standard required for passing the Entrance examination of the Royal Military College, Sandhurst, and the excellent results so far produced are shown by the fact that of the six candidates nominated for the Royal Military College in May 1923 the first two were educated at the School.

CHAPTER XI.

MISCELLANEOUS.

I.—Private Institutions.

460. The foregoing chapters of the report have dealt only with public or recognised institutions, that is to say, institutions which conform to certain standards and comply with certain regulations laid down by Government or by the universities. There are, however, in India over 34,000 unrecognised institutions, containing over six hundred thousand pupils. Statistics.

Private Institutions.

Class of Institutions.		1916-17.	1921-22.
ADVANCED			
Arabic or Persian	Schools	1,250	818
	Pupils	33,435	27,379
Sanskrit	Schools	1,061	720
	Pupils	17,914	13,946
Other Oriental Classics	Schools	698	64
	Pupils	9,269	954
TOTAL	Schools	3,009	1,602
	Pupils	60,618	42,279
ELEMENTARY			
Koran Schools	Schools	7,950	7,047
	Pupils	165,939	145,987
Vernacular Schools	Schools	24,510	23,671
	Pupils	343,901	325,267
Other Schools	Schools	2,334	2,487
	Pupils	74,180	125,592
TOTAL	Schools	34,794	33,205
	Pupils	584,020	596,846
GRAND TOTAL	Schools	37,803	34,807
	Pupils	644,638	639,125

461. A large number of the institutions included in the above table are relics of the old indigenous systems of learning in this country. They vary in importance from such institutions as the *Darul-Ulúm* at Deoband (United Provinces) and the *Gurukul* at Hardwar to *mulla* schools in which the Koran is taught by rote, *patshalas* kept by old Hindu pandits and *landemahajani* schools teaching the Indian system of bookkeeping to children of the bania class. Even of the schools classed in the foregoing table as vernacular schools it is probable that the majority fall under one or other of these heads.

Religious Schools.

462. Many private schools are wholly or primarily religious in character and give no instruction in the three R's. With the addition of secular subjects to their courses they tend to become absorbed in the ranks of recognised schools. If they still remain outside the public school system, it is not as a rule from any dislike on the part of the managers to the acceptance of recognition or aid from public revenues. On the contrary, the Inspector of Sanskrit Patshalas in the United Provinces says that "the matter of recognition engages too much attention in private institutions; some managers attempt to gain recognition in spite of inefficient teaching, by enticing good boys from other schools; some engage pandits of good attainments temporarily."[1] But the public resources for education being limited they cannot justifiably be spent on subsidising institutions which do not directly contribute to the reduction of illiteracy.

(a) In Burma.

463. Burma supplies by far the largest number of schools of this class. There were, in 1922, 17,526 unrecognised monastic schools in Burma with 183,208 pupils. At times systematic attempts have been made to introduce secular instruction into religious institutions and to improve their efficiency in order to bring them into the public school system. One such experiment with the *mulla* schools in Sindh has been described in paragraph 412. It is a curious fact that one of the chief stumbling blocks to the recognition of *mulla* and monastic schools is the ignorance and even dislike of arithmetic shown by religious teachers. A well-intentioned device for popularising this subject in private monastic schools in Burma, the Mulagananthincha examination, was after seven years' trial found to cost more than it was worth and was on the advice of the Divisional Boards abandoned.

(b) In Sind.

Venture Schools.

464. Next in numercial importance are the private venture schools. These are primary schools started by individuals, often very ill-educated, to gain a living. Many of them are closed after providing a brief and precarious livelihood for

[1] United Provinces, p. 137.

their originators. Others which show by their attendance a reasonable prospect of permanence and which are conducted with a certain amount of efficiency obtain recognition and, if funds permit, grants from local bodies.

"National" Schools.

465. The steady annual decrease in the number of private schools of all classes, save one, is due to their gradual absorption in this way into the public school system. The one exception to which I refer is the class entitled "other elementary schools." The table shows a considerable increase under this head; because it includes the "national" schools which were founded as a result of the non-co-operation movement. Of these schools little can be written because little is known: an account of their origin has been given in the first chapter of this Review. One inspector writes of them "These unrecognised schools are a serious menace to the well-being of the rising generation. All kinds of tactics are employed to attract boys from other schools and no spirit of authority is inculcated. Departmental recognition is neither asked for nor cared for, there being no restrictions to the admission of their products to recognised schools."[2] The following remarks from Burma admit of more general application:—"The future of National schools is naturally a subject of anxiety not only to Government but also to their present supporters. Both sides are probably looking forward to the possibility of reapproachment. Government realises the duty of co-operating if possible with all voluntary educational agencies and of encouraging all honest attempts to reproduce and develop the true genius of the Burmese people. The national school managers on the other hand, when political soreness heals and when they take the educational side of their work more seriously, may be expected to feel the need of grants-in-aid, for there is no doubt that, in spite of monthly subscriptions and collections at political meetings and pagoda feasts, they are sadly hampered for want of money."[3]

Particular Schools.

466. Finally, there are a few institutions of special character which, while maintaining a self-imposed high standard of efficiency, have not sought recognition, since they are unwilling to admit of any restrictions on their free development along original lines. Such for example are the *Gurukul* at Hardwar where are reproduced the monastic traditions of ancient Hindu education, the university for women at Poona which has been described in paragraphs 103 and 255 and the *Santiniketan* at Bolpur. This last-named institution owes its foundation and inspiration to the genius of Dr. Rabindra-

[2] Punjab, pp. 61-62.
[3] Burma, p. 82.

nath Tagore. Of it the Calcutta University Commission reported as follows[4]:—

"It is a boarding school for boys; situated on a rolling upland in open country, and combining, in its course of training and methods of discipline, Indian tradition with ideas from the West. With regard to the general work of the school it must suffice to say that it is no small privilege for boys to receive lessons in their vernacular from one of the most accomplished and celebrated writers of the age. No one who has seen the poet, sitting bare-headed in a long robe in the open verandah of a low-roofed house—the wide hedgeless fields stretching to the distant horizon beyond—with a class of little boys, each on his carpet, in a circle before him on the ground, can ever forget the impression, or be insensible to the service which Sir Rabindranath Tagore renders to his country by offering to the younger generation the best that he has to give." "At Bolpur he gives the central place to studies which can best be pursued in the mother tongue; makes full educational use of music * * * and of dramatic representation * * *, of imagination in narrative and of manual work; of social service among less fortunate neighbours and of responsible self-government in the life of the school community itself."

II.—Oriental Studies.

467. The study of the classics forms a part of the ordinary course of general education in Indian secondary schools and colleges; in fact by nine universities a student is required to pass in a classical language for matriculation. The classical instruction provided in schools and colleges for general education is conducted on modern lines, modified in the case of schools by the very restricted knowledge of modern methods and modern study possessed by the maulvis and pandits employed as teachers. An account of an attempt to improve these methods has been given in paragraph 281.

Higher Institutions for Classical Learning.

468. Apart from the classical education given in the ordinary schools and colleges there are in India a large number of institutions specifically devoted to the study of Arabic, Persian and Sanskrit. Foremost among these are the Calcutta Madrassa, the Sanskrit Colleges of Calcutta and Benares and the Oriental College of the Punjab University at Lahore. One new Government Sanskrit College was opened during the quinquennium at Sylhet, and the Government of Bihar and Orissa took over the management of the Sanskrit College, Puri, and of the Madrassa Islamia Shamsul Huda at Banki-

[4] Calcutta University Commission Report, Vol. I, Chapter VIII, pp. 226—227.

pore, which has been liberally endowed by M. Nurul Huda, C.I.E. The present position is shown in the table below:—

Province.	Oriental Colleges.		Advanced private Institutions Teaching Classics.		Scholars in Arts Colleges reading Classics.
	Colleges.	Scholars.	Institutions.	Scholars.	
Madras	12	238	284	7,791	890
Bombay	..	..	88	2,737	3,307
Bengal	..	..	75	3,932	9,187
United Provinces	1	324	629	16,296	1,873
Punjab	1	132	151	2,802	1,988
Burma	..	..	61	868	102
Bihar and Orissa	..	..	199	4,643	1,264
Central Provinces and Berar	..	..	20	512	248
Assam	1	15	32	963	483
North-West Frontier Province	..	..	23	775	127
Minor Administrations	..	..	40	960	689
India 1921-22	15	709	1,602	42,279	20,158
India 1916-17	9	698	3,009	60,618	24,806

469. In these higher institutions of classical learning the traditional methods of study are tempered in varying degrees by modern methods of research. These methods are less in evidence in the tols, maktabs and madrassas which constitute the bulk of the "oriental" institutions. There are sixteen hundred such attended by over forty thousand scholars. Madrassas and tols are particularly numerous in eastern India and the problem of their future presents considerable difficulty. There are two aspects of this problem. The first aspect is that in which the situation presents itself to the more conservative or the more orthodox amongst the educated Hindu and Muhammadan population. They desire that the old learning which is passing away or at least suffering from lack of interest and encouragement should be fostered by Government in the towns and in the countryside so that society may have enlightened ministers everywhere at hand to strengthen and instruct the people in their faith and to correct such tendencies as there may be towards infidelity to the ancient canons of life and conduct. The other standpoint is that of the few who are in close touch with the more modern civilization. They may be drawn by sentiment towards the old institutions and may even give them some support; but they feel that the day of tols and madrassas is past, and that the tempering of modern life and learning with

Tols and Madrassas.

the ancient wisdom can be best achieved, so far as it can be achieved by educational means, by bringing the old and the new together in the higher institutions of learning with a view to interaction and the survival of the best in both."[5]

Bombay. Cama and Bhandarkar Institutes.

470. In Bombay, the Cama Oriental Institute and the Bhandarkar Oriental Research Institute deserve special mention in connection with the advancement of oriental studies and research. Both institutions are doing useful work. A fellowship has been endowed at the Cama Institute for the preparation of treatises on Iranian civilisation and literature, for the collection of manuscripts, etc., and certain prizes are also offered for special essays. The Bhandarkar Institute possesses a unique collection of manuscripts, including those of the Government Manuscripts Library, formerly deposited at the Deccan College. The manuscripts are lent out to scholars. Various publications have been undertaken by the Institute, including those of the Bombay Sanskrit and Prakrit Series which have been handed over to it by the Bombay Government. Classes in French and German were also opened but they have been discontinued for want of accommodation. The Institute publishes a research journal called the "Annals of the Bhandarkar Institute." A conference of orientalists from all over India was held at the Institute in November 1919 for the first time. "The conference was a splendid success. It gave to the world of scholars an idea of individual efforts in the field of oriental research and helped to start an exchange of ideas between the scholars carrying on isolated efforts in different directions."[6] The institute receives certain maintenance grants from Government.

Bihar and Orissa.

471. The Government of Bihar and Orissa have devoted much attention to the question of oriental education. A Superintendent of Sanskrit Studies was appointed in 1918 and the post has since been included in the Indian Educational Service. The Superintendent's duties include inspection, with the help of two assistants, of the Sanskrit teaching throughout the province and also the management of the Sanskrit examinations. A Superintendent of Islamic Studies was also appointed in 1922 and the institution of a Board of Islamic Education is under consideration.

Calcutta Sanskrit Association.

472. Most of the tols and madrassas prepare for certain oriental title or diploma examinations conducted in some provinces by Government, in others by the universities or by special boards. Such a board, for example, is the Council of the Calcutta Sanskrit Association, which was established in 1918. The main body of the Association, which is called the convocation, consists of a maximum of 500 members whose

[5] Assam, p. 65.
[6] Bombay report.

suggestions relating to the encouragement of Sanskrit learning, when reported upon by the Council, are submitted to Government for consideration. The Council consists of fifteen ordinary members, two being elected by the pandits of East and West Bengal; the remainder nominated by Government, together with five additional members, who are scholars trained in Western methods also nominated by Government. The Association conducts examinations and grants titles. As a result the tol is gradually coming within what might almost be called departmental standards, though there still remain many of the old type in which the Adhyapaka himself confers the titles.

473. The reports of other Directors contain little reference to old-time classical schools. There is no doubt that economic pressure has done much to reduce the attendance at institutions of this type. Government may, in deference to public opinion, help to keep alive many of these institutions, which can no longer maintain themselves by private support; but Government cannot find opportunities for the employment of their *ex*-students. Macaulay in his famous minute, written in 1835, quotes a petition from the *ex*-students of the Sanskrit College in which the petitioners represent that, after having been maintained and educated by Government for ten or twelve years, they find themselves turned on the world without "means for a decent living." The products of the old type of classical education imparted in tols, maktabs and madrassas find themselves at the present day in a very similar position. Decline in numbers.

III.—Reformatory Schools.

Total strength and expenditure of Reformatories in India. Statistics.

Province.	School (Place).	1921-22.			1916-17.		
		Boys.	Expenditure.	Average cost per boy.	Boys.	Expenditure.	Average cost per boy.
			Rs.	Rs.		Rs.	Rs.
Madras . .	1 (Chingleput)	262	32,121	128·5	248	25,857	104·3
Bombay .	1 (Yeravda)	172	19,021	108·1	91	1	·0
United Provinces .	1 (Chunar)	242	70,473	323·3	179	20,447	111·7
Punjab . .	1 (Delhi)	121	39,176	334·8	112	26,996	223·1
Burma .	1 (Thazi)	117	16,887	145·6	91	21,922	248·6
Bihar and Orissa .	1 (Hazaribagh)	350	1,16,018	202·2	459	1,19,060	256·6
India . .	*6	1,264	2,93,696	230·5	†1,180	†2,14,283	181·6

*In addition, there are Reformatory Schools at Jubbulpore (C. P.) and at Matunga and Byculla (Bombay), the returns of which are not included in the General Educational Tables for 1921-22. There is also a Juvenile Jail at Dharwar (Bombay).

† Excluding the Jubbulpore School (with 48 boys and an expenditure of Rs. 15,840 in 1916-17).

General. 474. Except for a slight rise in the cost per pupil in residence, due to inevitable increases in the salaries of the staff, there is very little to note in the history of reformatory schools during the last five years. These schools provide, in addition to general education, training in various industries, so that the boys can earn an honest livelihood on leaving. Cane-work, carpentry, boot-making and pottery are among the trades usually taught.

Hazaribagh. 475. The largest school, that at Hazaribagh, is used by the Governments of Bengal and Assam for juvenile offenders as well as by that of the province in which it is situated; the two former governments now contribute to the cost of the institution a sum calculated on the number of boys whom they send for admission. The staff has been completely reorganised. Among other changes the old guards, 45 in number, have been replaced by a staff of wardens and literate housefathers. "This change was made partly because it was found that men of the class from which the guards were recruited did the boys more harm than good, partly to render the school less like a jail and partly to provide a staff of men suitable to look after the boys outside schools."[7]

Indian Jails Committee. 476. This jail-like aspect of the Indian reformatory schools is severely commented on by the Indian Jails Committee, which visited them in 1919. The Committee considered that the number of boys collected in these institutions is, in nearly every case, much too large for a single superintendent, who is unable to give attention to individual cases; they noted also the absence of all female care. The Committee was struck by the prevailing gloom and lack of spirit among the boys.

Delhi and Yeravda. This is, however, not universal. The boys of the Delhi and Yeravda schools appear to enjoy a more interesting life. To quote from the report of the Superintendent of the latter institution; "the boys are allowed as much freedom as is consistent with the maintenance of school discipline. They get all the holidays which are granted to the secondary schools of the Presidency: these holidays are fully enjoyed as they are usually spent in rest, games or walks to interesting places in the neighbourhood. * * * * School games, *viz.*, cricket, football, *atya-patya*, *khokho*, gymnastic exercises and drill are played regularly every day strictly in accordance with the rules of the respective games. * * * A river being not far from the school, boys are taken in small batches to swim there generally on Sundays."[8]

477. The Jails Committee recommend that these schools should be made as like ordinary schools as possible. They suggest buildings on the cottage system in the country with a matron in attendance at each school.

[7] Bihar and Orissa, p. 128.
[8] Bombay report.

478. By the Madras Children's Act which was passed in 1920 the term " reformatory " school has been replaced by the term " certified " school. The general trend of the provisions of this Act is in the direction of bringing the institutions certified under it more into line with ordinary schools. The immediate effect of the Act will be the certification of the Chingleput School as a senior school for juvenile offenders from Madras City. It will continue to be a reformatory school for offenders from the mufassal. The health of the scholars at Chingleput suffered severely in 1919 and elaborate steps have been taken to improve the condition of the premises. Madras Children's Act.

479. The Bengal Children's Act, which was passed in January 1922, is applicable to both boys and girls and provides that youthful offenders may be sent to a Reformatory or Industrial school, and that neglected and destitute children may be sent to Industrial schools. The Act will be carried out by the Judicial Department with assistance from the Education Department in those clauses that relate to schools. Bengal Children's Act.

480. Records are kept of the after-careers of the *ex*-pupils of reformatory schools for two or three years after their release. In Bihar and Orissa two special deputy inspectors were employed for the purpose of keeping in touch with these boys. The distances that they had to cover, since the boys come from Bengal, Assam, Bihar and Orissa, were too great and the work is now performed by ordinary sub-inspectors who receive an allowance for it. After-careers.

481. The statistics given in the following table show the after-careers of boys released from the Chingleput, Yeravda, Matunga and Hazaribagh schools:— After-careers of discharged boys.

After-careers of discharged boys.

Period.	Careers of boys discharged during the period.						Total.
	Employed.	Unemployed.	Re-convicted.	Placed under Police surveillance.	Dead.	Untraced.	
1912—17	810	41	151	58	25	160	1,245
1917—22	770	138	136	14	16	160	1,234

IV.—Text-Book Committees.

482. A difficult problem of educational administration is the selection of books for use in recognised schools. In view of the very large number of scholars attending secondary and Functions of Text-Book Committes.

primary schools any work that has been officially approved for use as a text-book becomes a source of considerable profit to the author and publishers. Consequently the output of school books in some provinces is very large. Lists of approved books are published from time to time by each provincial department of education. In order to assist the Director in the selection of books for inclusion in the approved list there is, in every province, a text-book committee, composed partly of officials and partly of non-officials. The committees are generally resolved into sub-committees dealing with different classes of publications or with works in different vernaculars. A description of the operations of these bodies was given in the last review. Some idea of the extent of their work may be gained from the following figures for three provinces:—

Books dealt with between 1917 and 1922.

Province.	Considered.	Approved.	Rejected.	Still pending.
Bengal . . .	2,668	945	896	827
Bihar and Orissa .	4,435	1,643	1,982	810
United Provinces .	2,200	852	1,302	46

Even in a small province like the North-West Frontier Province the Director receives over five hundred books from publishers every year for consideration.

Objects of their work.

483. The work of text-book committees came in for a certain amount of criticism at the close of the last quinquennium and local governments were addressed by the Government of India on the subject. Many of the criticisms were based on the incorrect assumption that it is the function of a text-book committee to encourage authorship. The reasons on the other hand which should guide a text-book committee to approve of a book are, firstly, that it is one of the best books for the educational purpose for which it is designed and, secondly, that its cost is reasonable and within the means of the class of boy for whom it is to be prescribed. It was at one time customary to approve of one particular book only in each subject in each class. It is now generally recognised that apart from the disadvantage of creating monopolies it is desirable to allow the teachers some latitude in their choice of books. At the same time too wide a range of choice cannot be allowed or the standard will be lowered and boys migrating from one school to another may find themselves obliged to buy new sets of books. The Assam list aims at providing

an option of at least three suitable books in each class in each subject. Lists of books suitable for library and prize books are also published in most provinces.

Preparation of special Text-Books.

484. Sometimes it is necessary for Education Departments directly to encourage or even subsidize authorship. Such cases arise when a work of a particular nature, *e.g.*, a text-book in a small vernacular, is needed, the sale of which is not likely to be profitable. In these cases the Education Department or the text-book committee either advertise their requirements or more often select some suitable person to prepare the book in return for a remuneration. An officer in the employ of Government selected for such work receives an honorarium and is not permitted to retain an interest in the sale of the publication.

Standardisation of technical terms.

485. An interesting departure by the Punjab Text-Book Committee has been noticed in paragraph 158. Lists of terms used in physics, mathematics, geography, physiology, hygiene, education and agriculture have been prepared in English-Urdu and also in English-Punjabee: when they have passed the scrutiny of linguistic experts they will be standardised for use in approved text-books.

Use of unauthorised books and keys.

486. Text-book committees perform a very valuable educational function, and the services of their members, which are in all cases given gratuitously, must be gratefully acknowledged. The committees are not, however, in a position to see that the books which they reject are kept out of the schools. Since they only consider books submitted to them in print, it is natural to suppose that the publishers of a rejected book will do their best to dispose of its first edition. Though inspecting officers wage persistent war on the use of unauthorised books, it is an evil for which no satisfactory remedy has yet been found. More serious still is the use of keys and cram books which from their very nature never come before text-book committees for scrutiny. Unfortunately the methods of instruction and examination in many secondary schools encourage the use of such aids to memory. They will only disappear when it is no longer found worth while to produce them.

School Literature.

487. It is a matter for much regret that very little vernacular literature suitable for school libraries is produced in India. In some provinces rewards are offered by Government for such books. The result of these offers is disappointing. Such little original matter, as is forthcoming, is usually either poetical or of a religious nature. When an attempt is made to cater for the needs of school libraries it frequently takes the form of the translation of some biography. A few vernacular magazines for schools are published but these can only appeal to the older scholars. Most of the larger colleges and

a certain number of high schools also publish their own magazines. There are several magazines of good standing for the use of teachers and of those interested in education, but one of the best, the 'Indian Education' of Bombay, was discontinued for financial reasons in 1921.

Recommendations of the Central Advisory Board of Education

488. The question of the functions and constitutions of text-book committees was considered by the Central Advisory Board of Education at its seventh meeting held at Lahore during February 1923. Although the meeting took place long after the close of the quinquennium, a brief account of its recommendations will not be out of place. The general discussion centred round three main points:—(*i*) the selection of text-books, (*ii*) library and prize books and (*iii*) the best agency for the production and publication of text-books. The main conclusions arrived at by the Board on these points are summarised below:—

(*i*) The choice of text-books should be governed only by their educational value and suitability of price.

(*ii*) The number of approved text-books should be restricted to a definite figure in each subject so as to avoid unnecessary multiplication. The number need not necessarily be the same for each subject.

(*iii*) It is undesirable and unnecessary to prescribe particular text-books for government and aided schools, if the number of approved text-books is limited as proposed.

(*iv*) The time and labour spent in examining and reporting on books intended for prizes and libraries is not commensurate with the advantages derived.

(*v*) Official agency should only be employed for the production of text-books which are not of a remunerative nature. In the case of books produced through semi-official agency, *e.g.*, by competition, no monopoly for a term of years should be given.

V.—*Conferences and Committees.*

Central Advisory Board.

489. Of the Central Advisory Board of Education, which was constituted in 1921 some account has been given in the second chapter of this Review. The following are some of the subjects discussed at the four meetings of the Board held before March 1922:—Equivalence of examinations, problem of compulsory primary education, mental intelligence tests, the introduction of vocational studies in the general school curriculum, European and Anglo-Indian education, educational statistics, the education of the blind and deaf-mute in India.

One very tangible result of the labours of the Board is a complete revision of the statistical tables for education in India. The new tables will be used for the first time this year.

Conference of Secretaries of Advisory Committees.

490. In July 1917 the Government of India convened at Simla a conference of the secretaries of the provincial advisory committees for Indian students. The constitution and scope of work of these committees was fully discussed. (Since this conference the Lytton Committee on Indian students has sat and recommended that the work now carried out by the provincial advisory committees should be undertaken by the Indian universities.)

Conference on the teaching of English.

491. In August of the same year a conference was convened at Simla of Provincial representatives, both official and non-official, to consider the teaching of English in secondary schools. The main object of the Conference was to see how far modifications in the existing system of secondary education might be effected so that pupils might (*a*) obtain a better grasp of the subjects which they were taught, and (*b*) complete their secondary course with a more competent knowledge of English. The Conference was opened by His Excellency Lord Chelmsford. Although it provided a valuable opportunity to a number of persons interested in education for an exchange of views, no agreement was reached on any of the important points submitted to the members for consideration. It was indeed evident that many of the members had arrived with a strong prejudice in favour of the particular system in vogue in their own province, and had never seriously considered whether it was or was not susceptible of improvement. The problem of the stage at which English teaching should be commenced cannot be decided solely on educational grounds. Until English teachers are plentiful and cheap the introduction of English at an early stage in the secondary school course must handicap the village boy, who completes his course in a vernacular school before he is old enough for transfer to a secondary school.

Conference of Librarians.

492. In January 1918 an all-India Conference of Librarians (the first of its kind) was summoned by the Government of India and met in Lahore. Most Local Governments and universities, various departments of the Government of India, the Science Congress and the Mysore and Baroda States nominated representatives. Among the questions discussed were:—The making of a census of libraries; the kind of assistance which libraries may render to each other and to the reading public with a view to making their resources more accessible; the making of subject indexes and catalogues; the training of librarians and the appointment and pay of trained librarians; the preservation of paper in India in order

that the permanence of books, periodicals and records may be ensured.

Committee on Indian Students in England.

493. In the years following the war, the Indian students' problem in England became acute. A large number of students who had been prevented by the submarine menace from travelling to England left for that country to complete their studies. They found the universities full and had much difficulty in obtaining admission. The Secretary of State appointed in 1921 a committee, with Lord Lytton as Chairman and containing Indian representatives, to examine comprehensively the whole question of Indian students in the United Kingdom. The terms of reference included (*i*) the constitution and working of the advisory committees in India, (*ii*) the extent to which the Secretary of State's control should be exercised in this matter, and (*iii*) the reorganisation of the work to be undertaken in Great Britain, more especially with a view to providing for the practical training of students. The Committee commenced work in the United Kingdom in May 1921. They visited various industrial centres and made arrangements to leave England for India in October 1921 but the visit had to be abandoned since the Legislative Assembly refused to vote the necessary funds. The Committee published its report in 1922 in which they recommend:—

(*a*) The development of education in India as the only permanent solution of the problem under contemplation;

(*b*) that the Indian Students Department, as at present constituted, should be abolished, as also the hostel at 21, Cromwell Road;

(*c*) that grants-in-aid should be made to private organisations in Great Britain for the provision of hostels, etc., which should be left entirely to such private enterprise;

(*d*) the establishment of a Bureau attached to each Indian university which should supply students desiring to go abroad with all necessary information, and should also supply foreign universities with information about students.

The Committee made a number of minor recommendations dealing with such questions as the admission of Indian students into the University Officers' Training Corps in England. Their recommendations are now being considered by local Governments.

Provincial Committees.

494. Among provincial conferences which deserve mention is an enquiry into the education of the domiciled community held in Bengal in July 1918. The Committee concerned itself largely with the improvement of the pay of the teachers.

It also suggested the creation of a technical education board and a central technical institute in Calcutta. A conference of representatives of Anglo-vernacular education was opened in Burma in March 1921. As a result of its resolutions the curriculum of Anglo-vernacular schools in the Province is being approximated to that of European schools and a new drawing curriculum has been introduced. Mention has been made of the two committees appointed in Bihar and Orissa to consider primary, secondary and vocational education. In March 1921 the Governor in Council of the Central Provinces appointed a committee to consider and report on the employment of the depressed classes in the public services and the extension of industrial and technical education among them. In the same province a committee was also set up to consider the working of the compulsory education act. In the Punjab two important conferences were held—one on the relations of provincial and district board educational finance and the second on agricultural education. The recommendations of both the conferences were accepted by the local Government and are described in paragraphs 70, 180, 187, 225 and 331 of this Review. The Government of Bombay appointed in 1921 a committee, representing important employers of labour, to investigate the problems and draw up a scheme of technical and industrial education in the presidency. The terms of reference to the committee were very comprehensive, including an enquiry into the facilities for preparation for executive or subordinate positions in business concerns, the training of girls and women for industrial careers, the diffusion of a knowledge of business methods, and of the use of machinery, the establishment of new institutions and the modification of existing ones, etc. As a result of this enquiry the committee submitted two reports, one a majority report signed by ten members, the other a minority report signed by six members including the chairman, Sir M. Visveshvaraya, K.C.I.E.

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TO

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